Vol. VI DECEMBER, 1911 No. 3

MIDDLEBURY COLLEGE BULLETIN

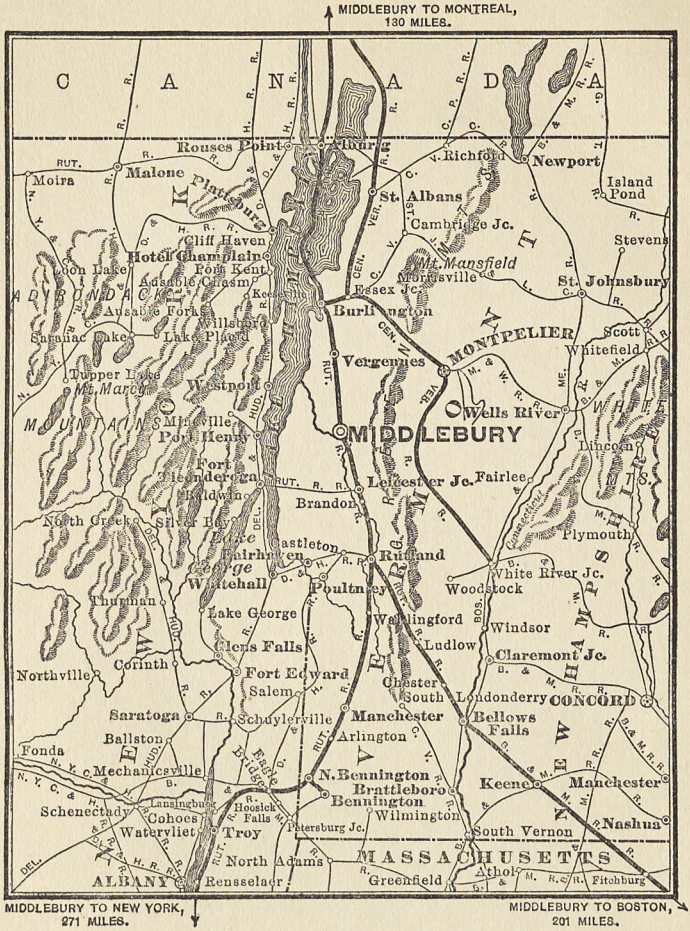
THE CATALOGUE

1911-1912

MIDDLEBURY, VERMONT

PUBLISHED BY THE COLLEGE

SEPTEMBER, OCTOBER, DECEMBER,
FEBRUARY, MAY, AND JULY



THE CENTRAL COLLEGE OF VERMONT

Equi-distant from the Northern and Southern Boundaries.

Half-way between Vermont's Largest Cities.

On New York Central Lines (Rutland Railroad).

Four through trains daily each way between New York and Boston and Montreal.

Fare (mileage) from New York, $5.42; from Boston, $4.02.

A Catalogue of Middlebury College

Middlebury, Vermont

One Hundred and Twelfth Year

1911-1912

Published for the College

1911

D. B. UPDIKE, THE MERRYMOUNT PRESS, BOSTON

CHARTER

OF MIDDLEBURY COLLEGE

IT *is hereby enacted* by the General Assembly of the State of Vermont, That there be, and hereby is granted, instituted and established a College in the Town of Middlebury, in the County of Addison; and that Messrs. Jeremiah Atwater, Nathaniel Chipman, Heman Ball, Elijah Payne, Gamaliel Painter, Israel Smith, Stephen R. Bradley, Seth Storrs, Stephen Jacob, Daniel Chipman, Lot Hall, Aaron Leeland, Gershom C. Lyman, Samuel Miller, Jedediah P. Buckingham and Darius Matthews shall be an incorporate society, or body corporate and politic, and shall hereafter be called and known by the name of THE PRESIDENT AND FELLOWS OF MIDDLEBURY COLLEGE: and that by the same name, they, and their successors, shall and may have perpetual succession; and shall and may be persons capable in law, to be impleaded, defend and be defended, answer and be answered unto; and also to have, take, possess, acquire, purchase or otherwise receive lands, tenements, hereditaments, goods, chattels, or estate; to grant, demise, lease, use, manage, or improve for the good and benefit of the said College according to the tenor of the donations, and their discretion. SECTION 1

And it is hereby further enacted, That the said President and Fellows, and their successors, shall and may hereafter have a common seal, to serve and use for all causes, matters and af- SECTION 2

fairs of theirs, and their successors, and the same seal to alter, break and make anew, as they shall think fit.

SECTION 3 *And it is hereby further enacted*, That the said Jeremiah Atwater shall be, and he is hereby established the present President; and the said Nathaniel Chipman, Heman Ball, Elijah Payne, Gamaliel Painter, Israel Smith, Stephen R. Bradley, Seth Storrs, Stephen Jacob, Daniel Chipman, Lot Hall, Aaron Leeland, Gershom C. Lyman, Samuel Miller, Jedediah P. Buckingham and Darius Matthews shall be, and they are hereby established the present Fellows of the said College; and that they and their successors shall continue in their respective places, during life, or until they, or either of them, shall resign, be removed, or displaced, as in this act is hereafter expressed.

SECTION 4 *And it is hereby further enacted*, That there shall be a general meeting of the President and the Fellows of the said College, in the said College-House, on the first Tuesday of November, annually, or, at any other time and place, which they shall see cause to appoint, to consult, advise and act, in and about the affairs and business of the said College; and that on any special emergency, the President and two of the Fellows, or any four of the Fellows, may appoint a meeting at the said College. Provided they give notice thereof to the rest, by letters sent and left with them, or at the places of their respective abodes, ten days before such meeting, and that the President and six Fellows, or, in the case of death, absence, or incapacity of the President, seven Fellows, convened as aforesaid, (in which case the

oldest Fellow shall preside) shall be deemed a meeting of the President and Fellows of said College; and in all the said meetings a major vote of the members present shall be deemed the act of the whole, and when an equivote happens, the President shall have a casting vote. That the President and Fellows of the said College and their successors, in any of their meetings assembled as aforesaid, may, from time to time as occasion shall require, elect and appoint a President or Fellows, and also the same remove, from time to time, for any misdemeanor, unfaithfulness, default or incapacity, six of the said corporation, at least, concurring therein; and shall have power to appoint a scribe, or register, a treasurer, tutors, professors, steward and butler, and all such other officers and servants as are usually appointed in colleges and universities, as they shall find necessary and think fit to appoint; for promoting good literature, and well ordering and managing the affairs of said College; and them, or any of them, at their discretion, to remove. And to prescribe and administer such forms of oaths, not being contrary to the constitution and laws of this State, or of the United States, as they shall think proper to be administered, to all those officers and instructors of the said College, or to such and so many of them as they shall think proper, for the faithful execution of their respective places, offices, and trusts.

And it is hereby further enacted, That the President and Fellows shall have the government, care and management, of the said College, and all the matters and affairs thereto belonging; and shall have power from time to time, as occasion shall

SECTION 5

require, to make, ordain, and establish all such wholesome and reasonable laws, rules and ordinances, not repugnant to the constitution and laws of this State, or the United States, as they shall think fit and proper, for the instruction and education of the students, and ordering, governing, ruling and managing the said College, and all matters, affairs, and things thereto belonging; and the same to repeal and alter, as they shall think fit, which shall be laid before the Legislature of this State, as often as required, and may also be repealed or disallowed by the said Legislature when they shall think proper.

SECTION 6 *And it is hereby further enacted*, That the President of the said College, with the consent of the Fellows, shall have power to give and confer all such honors, degrees, or licenses, as are usually given in colleges, or universities, upon such as they think worthy thereof.

SECTION 7 *And it is hereby further enacted*, That all the lands and ratable estate that does or shall belong to the said College, not exceeding the yearly value of two thousand dollars, lying in this State; and the persons, families, and estates of the presidents and professors, lying and being in the town of Middlebury, of the value of one thousand dollars, to each of said officers, and the persons of the tutors, students, and such and so many of the servants of said College, as give their constant attendance on the business of it, shall be freed and exempted from all rates, taxes, military service, working at highways, or other such like duties and services.

And it is hereby further enacted, That the Governor of this State be, and he is hereby empowered and requested to issue to the said President and Fellows, named in this Act, and to their successors, a charter of incorporation, made in due form of law, agreeably to the same. SECTION 8

Provided nevertheless, and it is hereby further enacted, That nothing in this Act, or any part thereof, shall be construed to extend to, or give to said corporation, by virtue thereof, any right to hold, possess or enjoy any property or estate, which has heretofore been granted or intended to have been granted, or given in charge and reserve, for the use of a college, or colleges, in this State; or granted, or intended to have been granted, and apportioned by this State to the University in Vermont. SECTION 9

Passed November 1st, 1800.

A true copy, attest,

ROSWELL HOPKINS, *Secretary.*

BEQUESTS

The Corporate name of Middlebury College is THE PRESIDENT AND FELLOWS OF MIDDLEBURY COLLEGE. *Bequests should be made in this name.*

THE PRESIDENT AND FELLOWS OF MIDDLEBURY COLLEGE

Rev. John M. Thomas, d.d., ll.d., President	*Middlebury*
Hon. John W. Stewart, ll.d.	*Middlebury*
Hon. Joseph Battell, a.m.	*Middlebury*
Brainerd Kellogg, ll.d.	*Morristown, N. J.*
Ezra Brainerd, d.d., ll.d.	*Middlebury*
Hon. David K. Simonds, a.b.	*Manchester*
Rev. William S. Smart, d.d.	*Brandon*
Erastus H. Phelps, a.m.	*Fair Haven*
Hon. John A. Mead, a.m., m.d., ll.d.	*Rutland*
Henry H. Vail, ll.d.	*New York, N. Y.*
George M. Wright, ll.d.	*New York, N. Y.*
Rev. James L. Barton, d.d.	*Boston, Mass.*
M. Allen Starr, m.d., ph.d., ll.d.	*New York, N. Y.*
James M. Gifford, ll.d.	*New York, N. Y.*
Hon. John G. McCullough, ll.d.	*Bennington*
Julian W. Abernethy, ph.d.	*Brooklyn, N. Y.*
John A. Fletcher, a.b.	*Middlebury*
Rev. Rufus C. Flagg, d.d.	*Burlington*
Hon. A. Barton Hepburn, ll.d., d.c.l.	*New York, N. Y.*
Hon. John E. Weeks	*Middlebury*
Hon. Frank C. Partridge, ll.d.	*Proctor*

John A. Fletcher
Secretary and Treasurer

PRUDENTIAL COMMITTEE

President John M. Thomas, *ex-officio*
John W. Stewart
John A. Mead
John A. Fletcher
Ezra Brainerd
John E. Weeks

FINANCE COMMITTEE

George M. Wright, *Chairman*
John W. Stewart
James M. Gifford
John A. Mead

COMMITTEE ON INSTRUCTION

Julian W. Abernethy, *Chairman*
Henry H. Vail
Rufus C. Flagg
Brainerd Kellogg

THE FACULTY AND OFFICERS

JOHN MARTIN THOMAS, D.D., LL.D., *President*

EZRA BRAINERD, D.D., LL.D., *President-emeritus*

HENRY MARTYN SEELY, A.M., M.D., *Professor-emeritus of Natural History*

CHARLES BAKER WRIGHT, A.M., L.H.D., *Professor of Rhetoric and English Literature*

WALTER EUGENE HOWARD, LL.D., *Dean, and Jermain Professor of Political Science and Professor of History*

WILLIAM WESLEY MCGILTON, A.M.,* *Professor of Chemistry*

MYRON REED SANFORD, A.M., L.H.D., *Professor of the Latin Language and Literature*

ERNEST CALVIN BRYANT, S.B., *Baldwin Professor of Physics*

EDWARD ANGUS BURT, PH.D., *Burr Professor of Natural History*

WILLIAM SARGENT BURRAGE, PH.D., *Professor of the Greek Language and Literature*

EDWARD DAY COLLINS, PH.D., *Professor of Pedagogy*

RAYMOND MCFARLAND, A.M., *Professor of Secondary Education*

ARCHIBALD DARIUS WETHERELL, A.M., *Assistant Professor of History*

DUANE LEROY ROBINSON, A.M., *Assistant Professor of French, Levi P. Morton Foundation*

G. WATTS CUNNINGHAM, PH.D., *Assistant Professor of Philosophy*

FRANK WILLIAM CADY, A.M., B.LITT. (OXON.), *Assistant Professor of English*

EVERETT SKILLINGS, A.M., *Assistant Professor of German*

PHELPS NASH SWETT, S.B., *Assistant Professor of Engineering*

RAYMOND HENRY WHITE, A.M., *Assistant Professor of Latin*

* On leave of absence for the year.

AVERY ELDORUS LAMBERT, PH.D., *Assistant Professor of Zoology*

CHAUNCEY ALLAN LYFORD, B.S., A.M., *Assistant Professor of Geology*

GEORGE HOFFMAN CRESSE, A.M., *Assistant Professor of Mathematics*

JOHN ALLEN MORGAN, A.M., *Assistant Professor of Political Economy*

RAY LYLE FISHER, A.B., *Assistant Professor of Physical Education*

IRVING WILDER DAVIS, B.S., *Instructor in Pomology*

CLARENCE NORMAN BOYNTON, A.M., *Acting Assistant Professor of Chemistry*

CAROLINE CRAWFORD, *Dean of Women, A. Barton Hepburn Foundation, Assistant Professor of Physical Education and Art*

HARRIET DUPEE GEROULD, B.S., *Assistant Professor of Home Economics*

ETTA MAY CLARK, *Librarian*

EDITH J. CHAMBERLAIN, *Cataloguer*

FRANK W. CADY, *Registrar*

ALICE C. HEATH, A.B., *Assistant Registrar*

JOHN A. FLETCHER, *Inspector of Buildings*

JOHN E. WEEKS, *Superintendent of Battell Campus*

ETHEL F. BARTLETT, *Secretary to the President*

WILLIAM H. FARRELL
HENRY HOPKINS
CHARLES JEWETT
} *Janitors*

MRS. WILLIAM MILLS
MRS. CHARLES JEWETT
} *Matrons*

FACULTY COMMITTEES

ADMINISTRATION
Wright, Howard, Bryant, Robinson, Fisher

CURRICULUM
Collins, Wright, Lambert

ADMISSION
Cady, Howard, Cresse

GRADUATE WORK
Sanford, Burt, Lyford

LIBRARY
McFarland, Morgan, Miss Gerould

ATHLETICS
Wetherell, Swett, Fisher

STUDENT AFFAIRS
Burrage, Miss Crawford, Skillings

STUDENTS' LITERARY ORGANIZATIONS
Morgan, Wetherell, Cady

MUSICAL ORGANIZATIONS
White, Cunningham, Miss Crawford

READING ROOMS
Swett, Davis, Miss Gerould

HYGIENE AND HEALTH
Lambert, Miss Gerould, Boynton

ADMISSION

PREPARATION FOR COLLEGE

IT is the desire of Middlebury College to relate its work to that of high schools and academies by offering admission, as far as possible, to students who have completed in a creditable manner a four years' course of study in a good secondary school. The College does not wish to dictate what studies shall be pursued in high school, and in the matter of admission credits will deal fairly with any subject which principals, teachers, and governing boards of secondary schools think most useful for their pupils. For certain courses, however, certain subjects are necessarily required as prerequisites to work of college grade, and these are specified in the following sections.

While no general counsel can take the place of the advice of a principal who knows the student, it may be said that thorough training in the use of good English is indispensable in any high school course. Algebra, Geometry, and at least one foreign language are prerequisite to a scientific course. A classical course, or a course for teachers, must contain Latin, and may well include Greek. Although Greek may be begun in College, the loss to the student who does not offer it for admission is greater than is often imagined, and the student who would devote special attention to literature, history, or philosophy is advised to fit himself in the language which is at the root of all modern culture.

METHODS OF ADMISSION

ADMISSION to College may be gained by any one of three methods:

1. By examination. Examination in all subjects for admission will be held at Middlebury, Thursday and Friday of Commencement week, and during the opening week of the first semester. A schedule may be obtained from the Secretary of the Faculty.

2. By certificate of the College Entrance Examination Board or the Regents of the State of New York. All applications for the Board examinations, which will be held June 17–22, 1912, must be addressed to the Secretary of the College Entrance Examination Board, Post Office Sub-Station 84, New York, and must be made upon a blank form to be obtained from the Secretary of the Board upon application. The examination fee is $5 for all candidates examined at points in the United States and Canada.

3. By certificate from the principal of the high school or academy at which the student has prepared. Blank certificates, prepared by the College, will be mailed upon application.

A student admitted upon certificate is regarded as on probation the first year, and will be dropped at any time if he is manifestly incompetent to do the required work.

REQUIREMENTS FOR ADMISSION

FOR admission to any course, fourteen points, or admission credits, are required. A point is a preparatory subject pursued one year with five recitation periods a week. Certain points in each course are required; the remainder of the fourteen may be made up from the list of options. The Classical and Pedagogical Courses only are open to women.

The required and optional subjects are indicated below.

FOR THE CLASSICAL AND PEDAGOGICAL COURSES

Required Points	
Latin	4
English	3
Algebra	1½
Geometry	1
Total required points	9½

Optional Points * (*Any four and one-half*)	
Greek	3
German	2 *or* 3
French	2 *or* 3
Greek History	½
Roman History	½
Medieval European History	½
Modern European History	½
English History	½
American History	½
Civics	½
Solid Geometry †	½
Physics	½ *or* 1
Chemistry	½ *or* 1
Botany	½ *or* 1
Physiology	½
Zoölogy	½
Physical Geography	½
Astronomy	½
Mechanical Drawing	1
Free-hand Drawing	1

FOR THE SCIENTIFIC COURSE

Required Points	
English	3
Latin, German, or French	2
Algebra	1½
Geometry	1
Total required points	7½

Optional Points (*Any six and one-half*)	
Latin	2, 3, *or* 4
German	2 *or* 3
French	2 *or* 3
Greek History	½
Roman History	½
Medieval European History	½
Modern European History	½
English History	½
American History	½
Civics	½
Solid Geometry †	½
Physics	½ *or* 1
Chemistry	½ *or* 1
Botany	½ or 1
Physiology	½
Zoölogy	½
Physical Geography	½
Astronomy	½
Mechanical Drawing	1
Free-hand Drawing	1

* For the Classical and Pedagogical Courses, Greek, German, or French must be presented, in addition to Latin.

† Students securing an admission credit in Solid Geometry will ordinarily be required to elect another study in its place, either in the Department of Mathematics or in some other Department of Instruction. In such cases Freshmen are allowed to take Sophomore Mathematics.

Equivalents for some of the above subjects, in either course, may be allowed in particular cases. Students slightly deficient in the total number of points required may be admitted on condition. Such conditions may be made up either by special examination before the beginning of the Sophomore year, or by successful completion of additional courses in the first two years of College. The specific requirements in the several subjects named above are outlined in the following paragraphs.

DEFINITION OF ADMISSION POINTS

LATIN: Four points required for admission to the Classical and Pedagogical Courses; two, three, or four optional for admission to the Scientific Course.

In general, that proficiency in the subject is required which results from a study of Latin in a systematic course of five lessons a week for four school years.

Grammar and Composition. The requirement is that there shall be in memory a vocabulary of the prose authors which have been read in the school, a masterful knowledge of the inflections, including the common irregular forms, and such familiarity with the rules of syntax as shall enable the candidate to write simple Latin prose. The proficiency expected is such as is gained by continual exercises in prose composition during all the years of preparation.

The authors necessary are as follows: Caesar: *Gallic War*, Books I-IV; or connected readings from Caesar: *Gallic War*, *Civil War*, and Nepos: *Lives*, not less in amount than Caesar: *Gallic War*, Books I-IV.

Cicero: *Orations against Catiline*, *Poet Archias*, and the *Manilian Law;* or connected readings from Cicero: *Orations*, *Letters*, *De Senectute*, and Sallust: *Catiline*, *Jugurthine War*, not

less in amount than the four *Orations against Catiline*, *Poet Archias*, and the *Manilian Law*.

Vergil: *Aeneid*, Books I-VI; or Vergil: *Aeneid*, Books I, II, IV, or VI, and 2500 additional verses of any work of either Vergil or Ovid.

The examination will contain (1) passages for translation from the authors suggested above; (2) sight passages suited to the proficiency resultant from the reading of authors indicated above; (3) questions on forms, syntax, literature, history, and prosody of the passages. Special importance will attach to the candidate's ability to deal intelligently with forms and syntax.

In the preparatory work, too much emphasis cannot be placed on accurate and continued reading of the Latin, on the thorough memorizing of a few attractive passages of text, and on constant drill at the board in composition and syntax, especially such as finds illustration in the passages memorized.

For the convenience of candidates, the examination may be divided into Preliminary and Final, to be taken in successive years.

GREEK: Three points, optional.

The examination in Greek presupposes a three years' course of five exercises a week. It may be divided between two successive years. The authors set for examination are Xenophon: *Anabasis*, Books I-III, and 50 additional pages of Attic prose, taken from the *Cyropaedea*, or *Memorabilia*, or both. For these, 50 pages, Book IV of the *Anabasis*, may be substituted.

Homer: *Iliad*, Books I-III, omitting the Catalogue; or Book I of the *Iliad* and 1000 additional lines of Homer.

The examinations in Homer and Xenophon will contain also sight passages from both these authors, and questions on prosody, literature, history, and antiquities. There will also be an examination in Grammar and Composition, testing the candidate's knowledge of meanings, forms, and syntax and his ability to write detached sentences. This examina-

tion will be based on a passage taken from somewhere in the second book of the *Anabasis*, and presupposes daily drill continued through two years.

GERMAN: Three points, optional.

Examinations will include a practical test on oral and aural training; schools certifying candidates for admission will be required to state in the certificate whether the candidate has had proper training of this kind. By oral and aural training is meant that the candidate has been constantly trained in pronunciation, dictation, and free reproduction (at first in English and later in German) of German anecdotes read aloud by the teacher. No credit will be given for certificates of admission covering a shorter course than that prescribed in the Elementary requirement as stated below, except to candidates offering four years of Latin and three of Greek.

I. Elementary: *Two points.*

The Elementary requirement embraces a systematic course of four or five periods a week, extending over two school years.

During the first year the work should comprise: (1) careful and continuous training in oral and aural elements, including drill in pronunciation, writing German from dictation, reproducing in English German anecdotes read aloud by the teacher, simple questions and answers on the reading-matter; (2) memorizing and frequent repetition of common idiomatic expressions; (3) drill upon inflection of adjectives with nouns, of pronouns, weak verbs, and the more common strong verbs; upon word order and the use of the modal auxiliaries and the more common prepositions; (4) the reading of 75 to 100 pages of easy prose, with constant practice in retroversion (the teacher translating a sentence from a review passage into English and the pupil turning it back into the exact German of the text) and in translating into German easy variations of sentences selected from the reading lesson (the teacher giving the English).

During the second year the work should comprise: (1) the reading of 150 to 200 pages of easy prose, it being recommended that none of the classic drama be read in the second year; (2) continuation of the oral and aural training of the first year; (3) accompanying practice in retroversion and free reproduction, and translation into German of easy variations of short and easy selected passages; (4) continued drill upon the rudiments of grammar.

II. INTERMEDIATE: *One point.*

The Intermediate requirement calls for a third year's work, which should comprise, in addition to the Elementary course, the reading of about 400 pages of moderately difficult prose and poetry, with constant practice, as in the Elementary course, in oral and aural elements, and in giving paraphrases or reproductions from memory of selected portions of the reading-matter; also grammatical drill upon the less usual strong verbs, use of articles, cases, auxiliaries of all kinds, tenses and modes (with special reference to the infinitive and subjunctive), and likewise upon word order and word formation.

By the end of the third year the student should be able to dispense, for the most part, with translating into English.

For good reading matter for both the Elementary and the Intermediate course, the "Report of the Committee of Twelve" (D. C. Heath and Co., Boston) is recommended.

FRENCH: Three points, optional.

Examinations will include a practical test in oral and aural training; schools certifying candidates for admission will be required to state on the certificate whether the candidate has had proper training of this kind; that is, whether he has had constant drill in pronunciation, dictation, and the free reproduction (at first in English and later in French) of anecdotes read aloud in French by the teacher. No credit will be given for certificates of admission covering a shorter course than that prescribed in the Elementary course as stated below,

except to candidates offering four years of Latin and three years of Greek.

ELEMENTARY: *Two points.*

The Elementary requirement embraces a systematic course of four or five periods a week, extending over two school years. During the first year the work should comprise: (1) careful drill in pronunciation; (2) the rudiments of grammar, including the inflection of the regular and the more common irregular verbs, and the elementary rules of syntax, with constant drill upon exercises illustrating these principles; (3) the reading of at least 100 pages of graduated texts, with constant practice in writing in French easy sentences based on the texts read, and in free reproduction; (4) simple conversation, and the writing of French prose from dictation.

The work of the second year should include: (1) the reading of at least 200 pages of easy modern prose in the form of stories, plays, or historical or biographical sketches; (2) constant practice, as in the previous year, in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read; (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, and in the writing of sentences illustrative of syntactical principles; (6) conversation, and the answering in French by the student of questions based on the text read; (7) retroversion and original composition.

INTERMEDIATE: *One point.*

The Intermediate requirement implies a systematic course of four or five periods a week, extending over a third school year. The work should comprise: (1) the reading of at least 400 pages of French of ordinary difficulty; (2) constant practice in giving French paraphrases, abstracts, or reproductions from memory of selected portions of the matter read; (3) the study of a grammar of moderate completeness; (4) writing

from dictation; (5) a continuation of the drill of the previous years in oral and aural training. During this year French should be, as far as possible, the language of the class-room, and by the close of the year students should be able to read intelligently, without translation, ordinary French prose or poetry.

ENGLISH: Three points. The requirements recommended by the Commission of Colleges in New England on Admission Examinations.

Note. No candidate will be accepted in English whose work is notably deficient in point of spelling, punctuation, idiom, or division into paragraphs.

1. Reading and Practice.

A limited number of books will be set for reading. The candidate will be required to present evidence of a general knowledge of the subject-matter, and to answer simple questions on the lives of the authors. The form of the examination will usually be the writing of a paragraph or two on each of several topics, to be chosen by the candidate from a considerable number—perhaps ten or fifteen—set before him in the examination paper. The treatment of these topics is designed to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. In place of a part or the whole of this test, the candidate may present an exercise-book, properly certified by his instructor, containing compositions or other written work done in connection with the reading of the books.

The books set for this part of the examination for 1912–13 are:

Group 1 (*two books to be selected*). Shakespeare: *As You Like It*, *Henry V*, *Julius Caesar*, *The Merchant of Venice*, and *Twelfth Night*.

Group 2 (*one book to be selected*). Bacon: *Essays;* Bunyan:

The Pilgrim's Progress, Part 1; Addison: *The Sir Roger de Coverley Papers* in the *Spectator;* Franklin: *Autobiography.*

GROUP 3 (*one book to be selected*). Chaucer: *Prologue;* Spenser: *Selections* from *The Faerie Queene;* Pope: *The Rape of the Lock;* Goldsmith: *The Deserted Village;* Palgrave's *Golden Treasury* (First Series), Books II and III, with special attention to Dryden, Collins, Gray, Cowper, and Burns.

GROUP 4 (*two books to be selected*). Goldsmith: *The Vicar of Wakefield;* Scott: *Ivanhoe* and *Quentin Durward;* Hawthorne: *The House of the Seven Gables;* Thackeray: *Henry Esmond;* Mrs. Gaskell: *Cranford;* Dickens: *A Tale of Two Cities;* George Eliot: *Silas Marner;* Blackmore: *Lorna Doone.*

GROUP 5 (*two books to be selected*). Irving: *Sketch Book;* Lamb: *Essays of Elia;* De Quincey: *Joan of Arc* and *The English Mail-Coach;* Carlyle: *Heroes and Hero-Worship;* Emerson: *Essays* (selected); Ruskin: *Sesame and Lilies.*

GROUP 6 (*two books to be selected*). Coleridge: *The Ancient Mariner;* Scott: *The Lady of the Lake;* Byron: *Mazeppa* and *The Prisoner of Chillon;* Palgrave's *Golden Treasury* (First Series), Book IV, with special attention to Wordsworth, Keats, and Shelley; Macaulay: *Lays of Ancient Rome;* Poe: *Poems;* Lowell: *The Vision of Sir Launfal;* Arnold: *Sohrab and Rustum;* Longfellow: *The Courtship of Miles Standish;* Tennyson: *Gareth and Lynette*, *Lancelot and Elaine*, and *The Passing of Arthur;* Browning: *Selections.*

2. STUDY AND PRACTICE.

This part of the examination presupposes a more careful study of each of the works named below. The examination will be upon subject-matter, form, and structure, and will also test the candidate's ability to express his knowledge with clearness and accuracy. The books set for this part of the examination for 1912–13 are: Shakespeare: *Macbeth;* Milton: *Lycidas*, *Comus*, *L'Allegro*, and *Il Penseroso*, or Tennyson: *Gareth and*

Lynette, *Lancelot and Elaine*, and *The Passing of Arthur*; Burke: *Speech on Conciliation with America*, or Washington: *Farewell Address* and Webster: *First Bunker Hill Oration*; Macaulay: *Life of Johnson*, or Carlyle: *Essay on Burns*.

HISTORY: Three points, optional.

1. Greek History: *One-half point.*
The history of Greece to the death of Alexander.

2. Roman History: *One-half point.*
The history of Rome through the reigns of the Antonines.

3. Medieval European History: *One-half point.*
To the fall of Constantinople.

4. Modern European History: *One-half point.*
From the fall of Constantinople.

5. English History: *One-half point.*

6. American History: *One-half point.*
Preparation in History will be given credit upon the basis of time devoted to each branch of the subject, rather than upon the amount of ground covered. The amounts indicated are believed to be a fair measure of one-half year's work. The training in History should require comparison and the use of judgment on the pupil's part, rather than the mere exercise of memory. The use of good text-books, collateral reading, practice in writing, and accurate geographical knowledge are essential.

CIVICS: One-half point, optional. A half-year's study in the principles, methods, and usages of American government.

MATHEMATICS: Three points, two and one-half points required.

a. ALGEBRA: *One and one-half points.*

(1) To Quadratics: *One point.*

The four fundamental operations for rational algebraic expressions; factoring, determination of highest common factor and lowest common multiple by factoring; fractions, including complex fractions, ratio and proportion; linear equations, both numerical and literal, containing one or more unknown quantities; problems depending on linear equations; radicals, including the extraction of the square root of polynomials and of numbers; exponents, including the fractional and negative.

(2) Quadratic Equations, Binomial Theorem, and Progressions: *One-half point.*

Simple cases of equations with one or more unknown quantities that can be solved by the methods of linear or quadratic equations. Problems depending upon quadratic equations. The binomial theorem for positive integral exponents. The formulas for the *n*th term and the sum of the terms of arithmetic and geometric progressions, with applications.

b. PLANE GEOMETRY: *One point.*

The usual theorems and constructions of good text-books, including the general properties of plane rectilinear figures; the circle and the measurement of angles; similar polygons; areas; regular polygons and the measurement of the circle. The solution of numerous original exercises, including loci problems. Application to the mensuration of line and plane surfaces.

SOLID GEOMETRY: *One-half point, optional.*

The usual theorems and constructions of good text-books, including the relations of planes and lines in space; the properties and measurement of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle. The solution of

numerous original exercises, including loci problems. Application to the mensuration of surfaces and solids.

PHYSICS: One point, optional.

The candidate's preparation in Physics should include:

(1) The study of at least one standard text-book, supplemented by the use of many and varied numerical problems, to the end that the pupil may gain a comprehensive and connected view of the most important facts and laws in elementary physics.

(2) Instruction, by lecture-table demonstrations, upon the general principles involved in the pupil's laboratory investigations.

(3) Individual laboratory work, comprising at least thirty-five exercises. Every candidate must present as a part of the examination a note-book, certified by the teacher, and containing in the candidate's own language a description of his laboratory exercises, the steps, observations, and results of each exercise being carefully recorded. The note-book must afford clear evidence of the pupil's ability to make accurate observations and to draw correct conclusions. Students who have not had the individual laboratory work may receive credit for one-half point.

CHEMISTRY: One point, optional.

The preparation in Chemistry should include individual laboratory work, comprising at least forty exercises selected from a list of sixty or more; instruction by lecture-table demonstrations, to be used mainly as a basis for questioning upon the general principles involved in the pupil's laboratory investigations; the study of at least one standard text-book, to the end that the pupil may gain a comprehensive and connected view of the most important facts and laws of Elementary Chemistry. Students who have not had the individual laboratory work may receive credit for one-half point.

BOTANY: One point, optional.

A half-year's text-book study of the morphology and physiology of seed and seedling, stem, root, leaf, flower, and fruit, together with the preparation of a note-book containing accurate laboratory studies on the morphology of the above organs; and an additional half-year's study on the morphology of cryptogams. One-half point will be credited for either of these courses offered independently.

PHYSIOLOGY: One-half point, optional.

The preparation in Physiology should include a study of the nature of foods and their history in the body; the essential facts of digestion, absorption, circulation, secretion, excretion, and respiration; the motor, nervous, and sensory functions; and the structure of the various organs by which these operations are performed. A note-book with careful outline drawings of the chief structures studied anatomically, together with explanations of these drawings, and the study of a good text-book are essential.

ZOÖLOGY: One-half point, optional.

A half-year's work in general natural history of common animal types; physiology of types studied and comparison of processes of animals and plants; classification of animals into phyla and leading classes, and the great characteristics of these groups; preparation of a note-book containing accurate laboratory studies of types, such as protozoan, sponge, hydra, worm, clam, insect, frog.

PHYSICAL GEOGRAPHY, OR PHYSIOGRAPHY: One-half point, optional.

One-half year in the study of a good modern text-book, together with weekly laboratory and field exercises.

ASTRONOMY: One-half point, optional.

A half-year's work, including the following among the chief topics: *The Celestial Sphere:* designation of the directions of a heavenly body. *The Earth:* its axial rotation; time, latitude, longitude; its orbital revolution; precession, aberration, the seasons, equation of time, the calendar. *The Moon:* its axial rotation, orbital motion, librations, phases, surface features, physical condition; lunar and solar eclipses. *The Sun:* its rotation, physical characteristics, light, and heat. *The Planets:* apparent and real motions, individual characteristics. *The Law of Gravitation:* its control of the solar system; the tides. *Comets and Meteors:* their nature and motions. *The Stars:* designation, classification by constellations; motions, distance, brightness; variables. *Stellar Systems:* clusters, nebulae; the stellar universe, cosmogony.

FREE-HAND DRAWING: One unit.

A full year's work in drawing should include simple geometrical plane and solid figures, the simple pieces of machinery, with a fair knowledge of the rules of perspective and light and shade as applied in free-hand sketching. The student should complete at least twenty drawings.

ADMISSION

TO ADVANCED STANDING

A CANDIDATE for admission to advanced standing who comes from an approved institution of collegiate rank may receive credit, without examination, for work done at such institution, provided he present a detailed statement of his previous work. This statement should include a full list of preparatory subjects accepted for admission by the institution previously attended, and also a list of the subjects

taken there for which credit has been attained. A letter of honorable dismissal from the institution last attended must also be presented.

Every other candidate for admission to advanced standing must first satisfy the entrance requirements of the courses which he desires to enter. He may then receive credit for any subject included in the curriculum of that course in which he can pass a satisfactory examination. Such students, not coming from other colleges, will be required to pay a fee of $5 if admitted to the Sophomore class, or $10 if admitted to higher rank.

Credit toward a degree for work done outside of College will be allowed on the applicant's passing an examination in the course for which he wishes credit.

COURSES OF INSTRUCTION

THE courses in the several departments are arranged in three groups, or courses of study: the Classical Course and the Pedagogical Course, both leading to the degree of Bachelor of Arts, and both open to men and women; and the Scientific Course, leading to the degree of Bachelor of Science, and open to men only. These courses are designed to be equal in difficulty and thoroughness.

CLASSICAL COURSE

THE Classical Course is recommended to students preparing for the ministry, the law, or medicine; also to those intending to become teachers, librarians, or journalists, and to those who wish to pursue advanced studies in philosophy, literature, or science. It embraces a larger proportion of subjects in language, literature, and philosophy, and is the better course for general culture. Four years of preparatory Latin are required, and at least one year of Latin in college. This course includes that formerly known as the Latin-Scientific. Greek is optional, but is earnestly recommended to those seeking the broadest culture.

The degree of Bachelor of Arts is conferred on those students who have met the requirements of the Classical Course.

SCIENTIFIC COURSE

THE Scientific Course is designed to meet the needs of students who intend to follow some branch of engi-

neering, or who wish to devote special attention to mathematics or some department of natural or physical science. There are men of practical bent of mind who can receive better mental development through a larger proportion of mathematical and scientific studies than is afforded in the Classical Course. At the same time they need thorough discipline in English and Modern Languages, in History and Political Science, and in Psychology. This course is adapted to such discipline, while it also sets the student well on his way toward further progress in technical subjects. Graduates from this course will be admitted to the Junior year of the best technical colleges without examination. Such an arrangement has been concluded with the Massachusetts Institute of Technology. By this means they will receive the general discipline and culture of college in but little more time and with slightly more expense than if they proceeded directly from the academy to the school of engineering. Latin may be presented for admission to this course, but is not required.

The degree of Bachelor of Science is conferred on those students who have met the requirements of the Scientific Course.

PEDAGOGICAL COURSE

The Pedagogical Course is designed for those who intend to prepare themselves for teaching, either as teachers of high school subjects in secondary schools or as superintendents of education. As fundamental to the study of education, History and Educational Psychology are required in the Freshman year; the His-

tory of Education is pursued throughout the Sophomore year; the Principles and Methods of Secondary Education is required in the Junior year, and in the final year actual practice in teaching or in supervision is provided. The design of the course is to apply normal methods, which have been so successful in the reformation of elementary education, to the problems of the secondary school.

The degree of Bachelor of Arts is conferred on those students who have met the requirements of the Pedagogical Course.

REGISTRATION AND CHOICE OF STUDIES

Every student is required to register at the Registrar's office at the beginning of each semester. No student will be received in any class until he has presented to the instructor a card from the Registrar's office admitting him to that class.

In each course and in each year some studies are required and some elective. All students are required to have at least fifteen hours of recitation a week. Students securing admission credits in any study of the curriculum will ordinarily be required to elect another study in its place, either an advanced subject in the same department or a study in some other department of instruction.

There are certain subjects which are required before graduation, but are not required in any particular year. These subjects are, therefore, listed as electives in the outline of studies. Every student must have taken before graduation one of the courses in composition or public speaking listed in the catalogue as English

13, 14, 15, 16. Before the degree of Bachelor of Arts is conferred, the candidate must have received credit for at least two years of French or two years of German, either for admission or in College; one year of History is required in College, and in the Classical Course one year of Natural Science. Before the degree of Bachelor of Science is conferred, the candidate must have received credit for at least three years of German and two years of French, either for admission or in College; one year each of Physics, Chemistry, and Biology is required in College.

A student may elect any study offered to a class below his own, and not already taken by him, if such choice is approved by the President and the instructor in that department.

A student may have more than fifteen hours of recitation a week, under the following conditions:

1. No student may take more than five subjects in any semester who has still conditions in any subject, or whose grade for the preceding semester has been lower than 80 per cent in more than one subject, except that Freshmen may take an additional study to cancel entrance conditions. Election may be from courses not higher than the year next above.

2. Each completed course shall count toward a degree, the degree being earned when 120 credits have been attained. A credit is understood as one hour a week for one semester, and 120 credits are secured regularly by 15 hours a week each semester for four years.

3. When a student has more than 15 hours in any semester, his rank for the semester shall be determined by the 15 hours in which he receives the high-

est marks, except that marks on all required subjects shall be included.

A student admitted without conditions may make request from the Registrar, at the time of registration, for an examination for college credit in any subject of the Freshman year. If such examination is passed with a grade above 70 per cent, credit will be allowed for the course toward any degree, as though the subject had been taken regularly in College. A student passing off any subject or subjects in this manner will be required to make up 15 hours of recitation a week from other studies offered to his class.

Any course may be taken in three years, and the Bachelor's Degree may be received at the end of the third year, if the candidate has attained 120 credits and has completed all required subjects.

SUGGESTED ELECTIVE GROUPS

EACH of the courses, Classical, Pedagogical, Scientific, allows students to shape their college work toward some definite professional or vocational end. This can be done only through a wise choice of elective studies. Middlebury College offers to every student the personal advice and assistance of the President and some member of the Faculty in laying out a purposeful plan of work. Certain groups of elective studies have been formed, as hereafter described, for the benefit of students who have definite aims. In connection with each one of these groups of study a member of the Faculty is appointed by the President to act as an adviser to students wishing to specialize in that group. At the beginning of his college course every student shall

consult the President, who will refer him to the adviser in the group best suited to his needs. Students in any group should elect as fully as possible from the courses offered in that group. For the student whose purpose is to secure in College, without reference to subsequent vocation, a broad, general foundation, the entire elective list is of course open, for such selection as shall seem wisest to himself and his advisers.

The coördination of electives here suggested, while encouraging definiteness of purpose, is in no way hostile to the claims of liberal training. In any group the electives indicated as advisable are not more than half the number that are necessary for securing a degree. The student, therefore, who adheres most closely to the suggestions that are offered need not fail of the general culture that it is the special purpose of the College to impart.

AGRICULTURE.

Elementary Biology, General Botany, Fungi and Lichens, Bacteriology, General Zoölogy, Physiology of Plants, Forestry, Descriptive Chemistry, General Laboratory Chemistry, Agricultural Chemistry, Surveying and Plotting, Sociology, Contracts and Commercial Law.

BUSINESS.

French or German, Political Economy, American Colonial History, American History from 1783, Constitutional History of the United States, Sociology, Contracts and Commercial Law, Descriptive Chemistry, General Laboratory Chemistry, Elementary Biology, General Botany, General Physics, General Zoölogy. See also Mineral Industry.

EDUCATION.

Students of Education, if intending to enter teaching or supervision as a profession, will take the Pedagogical Course. Others may elect Educational Psychology, History of Education in Europe, American Education, Secondary Education, and departmental courses in the subjects which they intend to teach. See Departments of Instruction, Pedagogy.

ENGINEERING.

Surveying and Plotting, Differential Calculus, Mechanical Drawing and Descriptive Geometry, Integral Calculus, Astronomy, French (two years), German (two years), Physical Measurements, Descriptive Chemistry, General Laboratory Chemistry. Admission to Junior standing in the best technological institutions necessitates having credits in Mechanical Drawing, Descriptive Geometry, French and German, Inorganic Chemistry, Calculus.

JOURNALISM.

Paragraph Writing, Principles of Literary Criticism, Victorian Prose, The English Novel, Medieval European History, Modern European History, American History from 1783, Constitutional History of England, Constitutional History of the United States, Political Economy, Sociology, Constitutional Law, French, German.

LAW.

Medieval European History, Modern European History, American Colonial History, American History from 1783, Constitutional History of England, Constitutional History of the United States, Argumentation and Debate, Political Economy, Elementary Law, Constitutional Law, Contracts and Commercial Law, Roman Law, Elements of American Law, Sociology.

MEDICINE.

Elementary Biology, General Botany, Bacteriology, General Zoölogy, Comparative Anatomy, Human Anatomy, Vertebrate Embryology, General Physics, Descriptive Chemistry, General Laboratory Chemistry, Qualitative Analysis, Gravimetric Analysis, Advanced Quantitative Analysis, Organic Chemistry, Sanitary Chemistry, French, German.

MINERAL INDUSTRY.

Descriptive Chemistry, General Laboratory Chemistry, Qualitative Analysis, Gravimetric Analysis, Advanced Quantitative Analysis, Organic Chemistry, General Geology, Economic Geology of Vermont, Petrography, Surveying and Plotting, Mechanical Drawing, Astronomy, Contracts and Commercial Law.

THEOLOGY.

Principles of Literary Criticism, Argumentation and Debate, Plato and Xenophon, A Study in Roman Philosophy, History of Philosophy and Ethics, Kant, Systematic Ethics, Contemporary Epistemology, Metaphysics, Studies in the Philosophy of Religion, History of Medieval Europe, American History from 1783, Political Economy, Sociology, Elementary Biology, General Zoölogy, German.

OUTLINE OF STUDIES*

FRESHMAN YEAR

FIRST SEMESTER

CLASSICAL	PEDAGOGICAL	SCIENTIFIC
Required	*Required*	*Required*
English 1	English 1	English 1
Latin 1	History 1	Mathematics 1
Mathematics 1	Latin 1	Physics 1

* See, on p. 31, the paragraph as to studies required at some time before graduation.

FIRST SEMESTER (CONTINUED)

CLASSICAL	PEDAGOGICAL	SCIENTIFIC
Elective (any two)	*Elective (any two)*	*Elective (any two)*
Botany 1	Botany 1	Botany 1
Chemistry 1	Chemistry 1	Chemistry 1
French	French	French
German	German	German
Greek	Greek	Greek
History 1	Mathematics 1	History 1
Zoölogy 1	Physics 1	Zoölogy 1
	Zoölogy 1	

SECOND SEMESTER

CLASSICAL	PEDAGOGICAL	SCIENTIFIC
Required	*Required*	*Required*
English 2	English 2	English 2
Latin 2	Latin 2	Mathematics 2
Mathematics 2	Pedagogy 2	Physics 2
Elective (any two)	*Elective (any two)*	*Elective (any two)*
Botany 2, 4	Botany 4	Botany 2, 4
Chemistry 2	Chemistry 2	Chemistry 2
French	French	French
German	German	German
Greek	Greek	Greek
History 2	History 2	History 2
Zoölogy 2, 4	Physics 2	Zoölogy 2, 4
	Zoölogy 2, 4	

SOPHOMORE YEAR

FIRST SEMESTER

CLASSICAL	PEDAGOGICAL	SCIENTIFIC
Required	*Required*	*Required*
English 3	English 3	English 3
	Pedagogy 3	Mathematics 3
	Zoölogy 3	

FIRST SEMESTER (CONTINUED)

*Elective (any four *)*

Agriculture
Botany 1, 3 or 5
Chemistry 1, 3
Engineering 1
English 13 or 15
French
Geology 1
German
Greek
History 3 or 5
Latin 4
Mathematics 3
Pedagogy 3
Philosophy 1, 5
Physics 1
Political Science 1, 5a
Zoölogy 1, 3, 5

Elective (any two)

Agriculture
Botany 1, 3 or 5
Chemistry 1, 3
Engineering 1
English 13 or 15
French
German
Greek
History 3 or 5
Latin 4
Mathematics 3
Philosophy 1, 5
Physics 3 or 4, 5
Political Science 1, 5a
Zoölogy 1, 5

Elective (any three)

Agriculture
Botany 1, 3 or 5
Chemistry 1, 3
Engineering 1
English 13 or 15
Geology 1
German
Greek
French
History 3 or 5
Pedagogy 3
Philosophy 1, 5
Physics 3 or 4, 5
Political Science 1
Zoölogy 1, 3, 5

SECOND SEMESTER

CLASSICAL

Required

Philosophy 2

Elective (any four †)

Botany 2, 4 or 6, 7
Chemistry 2, 4
Engineering 2
English 4, 14 or 16
Entomology
French
Geology 2
German
Greek
History 4 or 6
Latin 3

PEDAGOGICAL

Required

Botany 2
Pedagogy 4
Philosophy 2

Elective (any two)

Botany 4 or 6
Chemistry 2, 4
Engineering 2
English 4, 14 or 16
French
German
Greek
History 4 or 6
Latin 3
Mathematics 4
Philosophy 6

SCIENTIFIC

Required

Mathematics 4
Philosophy 2

Elective (any three)

Botany 2, 4 or 6, 7
Chemistry 2, 4
Engineering 2
English 4, 14 or 16
Entomology
French
Geology 2
German
Greek
History 4 or 6
Pedagogy 2, 4

* Except that either Physics 1, Botany 1, or Zoölogy 1 must be taken.

† Except that either Physics 2, Botany 2, or Zoölogy 2 must be taken.

SECOND SEMESTER (CONTINUED)

Mathematics 4
Pedagogy 2, 4
Philosophy 6
Physics 2
Political Science 2, 5b
Zoölogy 2, 4

Physics 6
Political Science 2, 5b
Zoölogy 2, 4

Philosophy 6
Physics 6
Political Science 2, 5b
Zoölogy 2, 4

JUNIOR YEAR

FIRST SEMESTER

CLASSICAL AND SCIENTIFIC

Required

Elective
(*any five*)

Agriculture
Botany 1, 3 or 5
Chemistry 1, 3, 5, 7
Engineering 3, 7
English 5 or 7, 11, 13 or 15
French
Geology 1, 3, 5, 6
German
Greek
History 3 or 5, 7, 11
Latin 6, 8, 11, 12
Mathematics 5, 7
Pedagogy 1, 3, 5
Philosophy 1, 3, 5, 7
Physics 3 or 4, 5
Political Science 1, 3, 5a, 7
Pomology 1
Zoölogy 1, 3, 5, 7

PEDAGOGICAL

Required

Geology 1
Pedagogy 5

Elective
(*any three*)

Agriculture
Botany 1, 3 or 5
Chemistry 1, 3, 5, 7
Engineering 3, 7
English 5 or 7, 11, 13 or 15
French
German
Greek
History 3 or 5, 7, 11
Latin 6, 8, 11, 12
Mathematics 5, 7
Pedagogy 1
Philosophy 1, 3, 5, 7
Physics 3 or 4, 5
Political Science 1, 3, 5a, 7
Pomology 1
Zoölogy 5, 7

SECOND SEMESTER

CLASSICAL AND SCIENTIFIC

Required

PEDAGOGICAL

Required

Geology 2
Pedagogy 6

SECOND SEMESTER (CONTINUED)

Elective
(*any five*)

Botany 2, 4 or 6, 7
Chemistry 2, 4, 6, 8
Engineering 4, 8
English 6 or 8, 10, 12, 14 or 16
Entomology
French
Geology 2, 4, 7
German
Greek
History 4 or 6, 8, 12
Mathematics 6, 8
Pedagogy 2, 4, 6, 12
Philosophy 4, 6, 8
Physics 6, 7
Political Science 2, 4, 5b, 8, 10
Pomology 2
Zoölogy 2, 4, 8

Elective
(*any three*)

Botany 2, 4 or 6, 7
Chemistry 2, 4, 6, 8
Engineering 4, 8
English 6 or 8, 10, 12, 14 or 16
Entomology
Geology 4
German
Greek
French
History 4 or 6, 8, 12
Mathematics 6, 8
Pedagogy 12
Philosophy 4, 6, 8
Physics 6, 7
Political Science 2, 4, 5b, 8, 10
Pomology 2
Zoölogy 2, 4, 8

SENIOR YEAR

FIRST SEMESTER

CLASSICAL AND SCIENTIFIC

Required

English 9

Elective
(*any four*)

Agriculture
Botany 1, 3 or 5, 7
Chemistry 1, 3, 5, 7
Engineering 5, 7
English 5 or 7, 11, 13 or 15
French
Geology 1, 3, 5, 6
German
Greek

PEDAGOGICAL

Required

English 9
Pedagogy 7*

Elective
(*any three*)

Agriculture
Botany 3 or 5, 7
Chemistry 1, 3, 5, 7
Engineering 5, 7
English 5 or 7, 11, 13 or 15
French
Geology 3, 5, 6
German
Greek

* Either Pedagogy 7 or Pedagogy 8 must be taken in the Senior year, but not both.

FIRST SEMESTER (CONTINUED)

History 7, 11
Latin 6, 8, 11, 12
Mathematics 5, 7
Pedagogy 1, 3, 5
Philosophy 1, 3, 5, 7
Physics 3 or 4, 5
Political Science 1, 3, 9
Pomology 1
Zoölogy 1, 3, 5, 7

History 7, 11
Latin 6, 8, 11, 12
Mathematics 5, 7
Pedagogy 9
Philosophy 1, 3, 5, 7
Political Science 1, 3, 9
Physics 3 or 4, 5
Pomology 1
Zoölogy 5, 7

SECOND SEMESTER

CLASSICAL AND SCIENTIFIC

Required

Political Science 6

Elective
(*any four*)

Botany 2, 4 or 6, 7
Chemistry 2, 4, 6, 8
Engineering 6, 8
English 6 or 8, 12, 14 or 16
Entomology
French
Geology 2, 4, 7
German
Greek
History 8, 12
Mathematics 6, 8
Pedagogy 2, 4, 6, 12, 14
Philosophy 4, 6, 8
Physics 6, 7
Political Science 2, 4, 5c, 10, 12
Pomology 2
Zoölogy 2, 4, 6, 8

PEDAGOGICAL

Required

Pedagogy 8*
Political Science 6

Elective
(*any three*)

Botany 2, 4 or 6, 7
Chemistry 2, 4, 6, 8
Engineering 6, 8
English 6 or 8, 12, 14 or 16
Entomology
French
Geology 4, 7
German
Greek
History 8, 12
Mathematics 6, 8
Pedagogy 10, 12, 14
Philosophy 4, 6, 8
Physics 6, 7
Political Science 2, 4, 5c, 10, 12
Pomology 2
Zoölogy 2, 4, 6, 8

* Either Pedagogy 7 or Pedagogy 8 must be taken in the Senior year, but not both.

DEPARTMENTS OF INSTRUCTION

I. BIOLOGY

Professor BURT
Assistant Professor LAMBERT
Mr. DAVIS

1. PLANT BIOLOGY (*Elementary Botany*)

An introductory course giving a general survey of the plant world from the simplest organisms up to the flowering plants. Lectures and recitations on protoplasm, the cell, cell structure, and the morphology, physiology, and reproduction of plants, and the relation of fungi and bacteria to fermentation, putrefaction, and disease. The laboratory work consists of learning to use the compound microscope and make preparations and studies of simple forms of plant life.

First semester. Required of B.S. students before graduation; elective for A.B. students. Laboratory fee, $5. Professor BURT.

2. ANIMAL BIOLOGY (*Elementary Zoölogy*)

This course is intended to follow and supplement Biology 1. An introduction to the facts of Biology as expressed in animal life. The fundamental differences between plants and animals, the animal cell as a type of living matter and as a unit of structure, evolutionary law as expressed in the progressive complexity of structure and function in animal forms, are presented in the lectures and recitations. A series of typical animals, illustrating the different aspects of the subject, will be studied in the laboratory.

Second semester. Required of B.S. students before graduation; elective for A.B. students. Laboratory fee, $5. Assistant Professor LAMBERT.

These two courses in Botany and Zoölogy are designed for those who wish to know something of the elementary principles and aims of these sciences, to lay a broad foundation for advanced scientific work, to teach Natural Science, or to study Medicine, Agriculture, or Forestry.

BOTANY

1. Elementary Botany

For description of this course, see Biology 1, Plant Biology.

2. General Botany of Flowering Plants

Laboratory work and recitations on seed, shoot, root, flower, and fruit, and on the more elementary features of germination, nutrition, pollination, dissemination, and plant breeding. Propagation and care of plants. Determination of plants and the preparation of herbarium specimens.

Second semester. Required of Sophomores in the Pedagogical Course; elective for Freshmen in the Classical and Scientific Courses. Those who have had Botany in high school may elect 1 *instead of* 2. *Laboratory fee*, $2. Professor Burt.

3. Fungi and Lichens

A course in which the higher groups of economic fungi and the myxomycetes and lichens are studied in detail. Edible and poisonous fungi, fungi destructive to timber and trees; lectures on their structure, life history, and classification. Laboratory work on external morphology, microscopic structure, and results produced by these plants; determination of the genera and frequently of the species studied. Unusual advantages for this course are afforded by the proximity of the College to forests.

First semester. This course alternates with 5. *Laboratory fee*, $5. Professor Burt. (To be given in 1913–14.)

4. Bacteriology

A course for general education on bacteria, germs, or microbes in their relation to the individual, the household, and the community. Lectures on the morphology and life history of bacteria, culture methods, drinking water, contamination of food, beneficial bacteria, some pathogenic species and the diseases they cause, infection, and immunity. Laboratory work in the preparation of culture media, destruction of bacteria, isolation of species, and study of pure cultures. This course affords a good foundation for the special work on pathogenic bacteria in medical colleges.

Second semester. Elective after 1; *alternates with* 6. *Laboratory fee*, $5. Professor Burt and Mr. Davis. (To be given in 1913–14.)

5. Histology of Plants

Recitations and laboratory work on external morphology of plants, the cell, cell fusion, tissue systems, structure of woods, the development of the secondary or adult tissues from embryonic tissue; technique of imbedding, sectioning, and staining for study of nuclear and cell structure.

First semester. Elective after 2 *or Botany in high school; alternates with* 3. *Laboratory fee*, $5. Professor Burt. (To be given in 1912–13.)

6. Physiology of Plants

Continuation of 5. Having studied in 5 the anatomy of the plant body, the student here takes up in recitation, laboratory work, and experiments the functions of the several tissues and organs of the living plant. These studies cover stability of the plant body, nutrition, respiration, starch and sugar formation, work of plant ferments, growth, phenomena of movement, and reproduction.

Second semester. Elective after 5; *alternates with* 4. *Laboratory fee*, $5. Professor Burt. (To be given in 1912–13.)

7. Forestry

For description of this course, see Applied Courses in Biology.

ZOÖLOGY

1, 2. Physiology and Hygiene

An introduction to the fundamental facts of human physiology, and the laws of health based upon the physiological conditions and activities of the body. The first part of the work consists of a brief review of the structure of the body, followed by a more complete consideration of the functions of its various parts. For the benefit of students taking the Domestic Science Course, emphasis will be laid on the physiology of nutrition. The second part of the work will be given to the consideration of the conditions necessary for the maintenance of the general health of the body.

First and second semesters. Elective for all classes. Assistant Professor Lambert.

3. General Zoölogy

This course includes a broad survey of the invertebrate and vertebrate phyla, their forms, classification, and general distribution. Some consideration will be given to the economic importance of certain groups. Typical representatives of the main divisions of the animal kingdom will be examined in the laboratory.

First semester. Required of Sophomores in the Pedagogical Course; elective for Sophomores, Juniors, and Seniors in the A.B. and B.S. Courses. Laboratory fee, $5. Assistant Professor Lambert.

4. Elementary Zoölogy

For description of this course, see Biology 2, Animal Biology.

5. Invertebrate Zoölogy

A systematic study of the invertebrate animals. This course includes a close examination of typical representatives of the larger subdivisions of the invertebrate animals from the viewpoint of classification. Form as a means of adaptation; structure in its relation to function; variation, natural selection, and heredity as principles of evolutionary study, will be discussed in the lectures. Material illustrating the principles under discussion will be examined in the laboratory.

First semester. Elective for students who have had 3 *or* 4. *Laboratory fee*, $5. Assistant Professor Lambert.

6. Vertebrate Embryology

This course consists of a detailed study of the embryonic development of a few typical vertebrates. The frog and chick will be used as types for study in the laboratory. Attention will be given to the development of a typical mammal.

Second semester. Elective for students who have had 7 *and* 8. *Laboratory fee*, $5. Assistant Professor Lambert.

7, 8. Vertebrate Anatomy

A systematic study of the vertebrate animals based upon a careful examination of their form and structure. The development of the animal body is illustrated by a careful study and comparison of the bony structures and organs of representatives of the principal vertebrate groups. Analogous and homologous organs, convergent and divergent development, natural selection and heredity, as these principles relate to the vertebrate animals, are discussed in the lectures. Types illustrating progressive structure of animals will be examined in the laboratory. Considerable time will be given to the more exact study of the anatomy of a mammal during the latter part of the course.

First and second semesters. Elective for all students who have had 5; *alternates with* 5 *and* 6. *Laboratory fee*, $5 *for each semester.* Assistant Professor Lambert.

APPLIED COURSES IN BIOLOGY

Agriculture

Soils and fertilizers. Soil formation; the classification of soils; physical and chemical properties; methods of soil improvement and the maintenance of fertility; tillage; underdrainage; manures; commercial fertilizers, and soil amendments and their characteristics, methods of preservation, and uses. Text-book and lectures.

First semester. Elective after Freshman year. Mr. Davis.

Pomology

1. Practical Pomology

A study of the fundamental principles of horticulture and fruit growing, including selection of sites, soils, wind-breaks, choice of stock, pruning, tree surgery, cultivation, spraying, etc. Text-book, lectures, and field exercises.

First semester. Elective for Juniors and Seniors. Mr. Davis.

2. Commercial Pomology

The storing and marketing of fruits, including harvesting, storage houses, fruit packages, methods of grading and packing, marketing, etc. Text-book, lectures, and practical exercises.

Second semester. Elective after Pomology 1. Mr. Davis.

Economic Entomology

A study of the structure of insects as applied in the principles of classification; the different groups, with some of the more important economic insects in each group, including their life histories, habits, and methods of control.

Second semester. Elective after Freshman year. Mr. Davis.

Forestry

A course treating especially of the management of wood lots and forests for New England. Lectures on the scope and function of forestry, utility of forests, most valuable trees and the tree weeds of New England, improvement of the character and composition of the forest, establishing woods by seeding, transplanting, and coppice growth, utilization of waste land for tree crops. Practical exercises in recognizing the kinds of forest trees, planting tree seeds and transplanting seedlings, principles of thinning woods, and measurement of logs and timber.

Second semester; two hours and one half-day a week. Elective for those who have taken 2 *or its equivalent. Students giving special attention to Forestry should take, in addition to this,* Botany 5 *and* 6 *for structure of timber and growth of trees, and* 3 *for destruction of timber by fungi and diseases of trees. These courses provide two years of continuous advanced work in Forestry.* Professor Burt.

II. CHEMISTRY

Professor McGilton
Acting Assistant Professor Boynton
Assistant Professor Lyford

1. Descriptive Chemistry

Non-metallic elements and their principal compounds and their relation to the metals. Acids, bases, and salts are studied carefully and their formation illustrated. Electrolytic dissociation, ionisation, Faraday's laws, and the theory of solution are discussed at length and illustrated. Numerous chemical problems involving atomic and molecular weights, percentage composition, etc., are solved by the student. One of the main objects of the course is to give the student a broad apprecia-

tion of the importance of chemical processes in the structure of matter and the relations of these processes to life. Lectures and recitations.

First semester. Freshman elective, required of B.S. students some time before graduation. Laboratory fee, $5. Assistant Professor BOYNTON.

2. GENERAL LABORATORY CHEMISTRY

Lectures, recitations, and laboratory work on general descriptive chemistry. By means of the study of the preceding semester the student is able to prepare the most important chemical compounds at his own desk. Full notes are kept by him of each step taken and each observation made, and frequent reports are presented to the instructor. The student has constantly brought to his attention, by lectures and the use of reference books, the sources and industrial value of the substances which he handles.

Second semester; three hours a week, or three periods a week in the laboratory. Elective in the same year for A.B. students who have completed 1. *Must be taken by all B.S. students consecutively with* 1 *some time before graduation. Laboratory fee,* $5. Assistant Professor BOYNTON.

3. QUALITATIVE ANALYSIS

Special attention is given to the analytical reactions of each base and to practice in the separation of metals from each other in unknown liquid and solid mixtures. The characteristic reactions of acid radicles are studied and the complete constitution of unknown bodies is determined. Preliminary tests and blow-pipe analysis are a part of the work.

First semester. Open to all students who have completed 2. *Laboratory fee,* $5. Assistant Professor BOYNTON.

4. GRAVIMETRIC QUANTITATIVE AND VOLUMETRIC QUANTITATIVE ANALYSIS

Analysis of minerals and ores. The various methods for de-

composing silicates and refractory substances and bringing them to a condition of solution are carefully studied. The student learns the use and manipulation of the chemical balance, makes quantitative determinations of metals, and studies the percentage composition of compounds. Stoichiometry, with practice in chemical problems, is especially emphasized. The making of standard solutions and their applications in the determination of the percentage composition of bodies volumetrically form a part of the work.

Second semester. Open to all students who have completed 3. *Laboratory fee*, $5. Assistant Professor BOYNTON.

5. INDUSTRIAL AND SANITARY CHEMISTRY

The preparation and dyeing of textile fabrics. Chemical processes involved in the paint, oil, leather, soap, paper, iron, and steel industries. Analysis of water. The purification of water supplies. Disinfectants, antiseptics, and deodorants. The chemistry of cooking and the analysis of foods and beverages, with reference to dietary adulterations.

First semester. Elective for those who have taken 4. *Laboratory fee*, $5. Assistant Professor BOYNTON.

6. AGRICULTURAL CHEMISTRY

The analysis of soils, fertilizers, and feeding materials. The effect of acid-forming and base-forming elements in soils and fertilizers. The composition of foods and the principle of balanced rations. The analysis of dairy products; the determination of the per cent of ash, water, sugar, and total solids in milk, butter, and cheese. Determination of the per cent of fat by both the Babcock method and the Adams-Soxhlet continuous extraction method. Factors which influence the sanitary conditions of dairying. The effects of bacteria in milk and its products. The principles of nitrification and the influence of bacteria in soils.

Second semester. Elective for those who have taken 4. *Laboratory fee*, $5. Assistant Professor BOYNTON.

7, 8. Organic Chemistry

A study of the genetic relationships of the more important classes of carbon compounds and their bearing upon technical and agricultural arts. A brief study of the principles involved in the phenomena of asymmetric compounds, optical activity, and the fermentation changes of organic substances. Organic synthesis.

First and second semesters; two class exercises or lectures, and one two-hour laboratory period each week. Elective for those who have taken Qualitative Analysis. Laboratory fee, $5 for each semester. Assistant Professor Lyford.

III. ENGINEERING

Assistant Professor Swett

1. Mechanical Drawing

Drawing instruments and their use; mechanical drawing from objects; geometrical problems; lettering, dimensioning, tinting, tracing, and the making of blue prints; orthographic projection; isometric drawing, intersection and development of surfaces.

First semester; three two-hour periods a week. Elective for Sophomores. Instruments furnished; fee, $1.

2. Descriptive Geometry

Representation of the point, line, and plane with problems relating to them; representation of plane surfaces, single curved surfaces, and surfaces of revolution; intersection of surfaces by lines, by planes, and by other surfaces; development of surfaces. A course particularly for those students intending to obtain advanced standing in some school of engineering.

Second semester; three two-hour periods a week. Elective for students who have completed 1. *Instruments furnished; fee*, $1.

3, 4. Surveying and Plotting

This course emphasizes field work, actual practice with the various surveying instruments, work in the drawing-room, including the computations which arise in the work of the surveyor, also the making of scale drawings, profiles, and contour maps from notes taken by the students in the field. The use of the chain, tape, compass, and transit is taught during the first semester, followed by the various forms of leveling instruments during the second semester.

First and second semesters; three periods a week. Elective for students who have completed 1 *and Mathematics* 3. *Fee for instruments*, $1 *for each semester.*

5. Advanced Surveying

Topography and topographical drawing; use of the stadia, plane table, and barometer; railroad curves; the construction of stadia diagrams, and the making of topographic maps from surveys made with the camera.

First semester; three periods a week. Elective for those who have completed 3 *and* 4. *Fee for instruments*, $1.

6. Applied Mechanics

Statics, stresses in frames, dynamics. The general methods and applications of statics, including the determination of reactions, stresses in frames; of distributed forces, center of gravity; of moment of inertia, radius of gyration of plane areas and solids; of kinematics and dynamics including the equations for uniform and varying rectilinear and curvilinear motion, centrifugal force, unresisted projectile, pendulum, harmonic motion, rotation, combined rotation and translation, momentum and angular momentum, center of percussion, impact, work, power, and kinetic energy.

Second semester. Elective for those who have had Mathematics 5 *and* 6.

7, 8. Municipal Engineering

Materials of Engineering

The physical and mechanical properties of the various materials used by the engineer, such as stone, brick, cement, concrete, wood, iron, and steel; the manufacture of iron, steel, and cement.

Highway Construction

The economies, location, construction, and maintenance of country roads; city pavements, dust prevention, and preservation of macadam roads; roads and pavements in foreign countries.

Elementary Hydraulics, Water Supply

To include the flow of water through pipes, the location and construction of reservoirs, the location of hydrants and fire protection, the prevention of water contamination.

Sanitary Engineering

The study of the design and construction of sewerage systems; works attending the various methods of sewage disposal; garbage disposal.

Sanitary Science and Public Health

Lectures on health and disease, the germ theory, dust and its dangers, infection and contagion, drinking water and sewage as vehicles of disease, the purification of water and sewage.

First and second semesters. Elective for Juniors and Seniors.

IV. ENGLISH

Professor WRIGHT
Assistant Professor CADY

1. COMPOSITION AND RHETORIC

The work is divided between practical composition and a study of the art on the basis of its principles. Weekly compositions are required, which are progressive throughout the year.

First semester. Required of all Freshmen. Assistant Professor CADY.

2. COMPOSITION AND RHETORIC

A continuation of the work of 1.

Second semester. Required of all Freshmen. Assistant Professor CADY.

3. HISTORY OF ENGLISH LITERATURE

A rapid treatment of the successive phases of English literary development. The leading facts of English history are also discussed whenever they are necessary to an adequate understanding of the subject.

First semester. Required of all Sophomores. Professor WRIGHT.

4. AMERICAN LITERATURE

A treatment of the subject similar to that of 3.

Second semester. Elective for Sophomores. Professor WRIGHT.

5. VICTORIAN PROSE

Macaulay, Carlyle, Ruskin, Arnold, Froude, Huxley. A study of certain notable utterances of each, to determine their chief characteristics as stylists and the nature of their contributions to Victorian thought.

First semester. Elective for Seniors and Juniors. Professor WRIGHT.

6. Victorian Poetry

Tennyson, the Brownings, Matthew Arnold, the Rossettis, William Morris. A study similar to that outlined in 5.

Second semester. Elective for Seniors and Juniors. Professor Wright.

7. The Principles of Literary Criticism

A detailed study of the nature of literature and of its intellectual, emotional, and formal elements.

First semester. Elective for Seniors and Juniors. Professor Wright. (To be given in 1912–13.)

8. English Versification

A study of its history and principles.

Second semester. Elective for Seniors and Juniors. Professor Wright. (To be given in 1912–13.)

9. An Introduction to General Literature

A consideration of certain great works as parts of a world literature rather than as exponents, merely, of national life.

First semester. Required of all Seniors. Professor Wright.

10. Old and Middle English

A course in the development of the English language and literature from the first Teutonic settlements to the close of the fourteenth century, the end in view being a literary appreciation of Chaucer soundly based on a knowledge of the fundamental facts of English linguistic history.

Second semester. Elective for Juniors. Professor Wright.

11. Shakespeare

This course is an intensive study, through the medium of the plays, of the development of Shakespeare, the man and the dramatic artist.

First semester. Elective for Seniors and Juniors. Assistant Professor Cady.

12. The English Drama to 1642

A study of the sources of the Elizabethan drama, its characteristics at its height, and the causes which led to its decline. Based upon the reading of the works of dramatists other than Shakespeare, upon lectures, and upon extensive reading in the Library. While 12 is planned as a possible continuation of 11, either may be elected without the other.

Second semester. Elective for Seniors and Juniors. Assistant Professor Cady.

13. Expository Writing

Writing of single and connected paragraphs, the aim being to develop precision in statement and skill in sentence structure. A detailed study of the forms of the paragraph. The writing of frequent themes to be read and criticised in the class.

First semester. Elective for Sophomores, Juniors, and Seniors. Assistant Professor Cady. (To be given in 1912–13.)

14. Public Speaking; Argumentation

The theory of argumentation; practice in brief-making and in the construction and delivery of argumentative speeches. Extended analysis of typical speeches. Frequent delivery of prepared addresses before the class will be required of all who take the course.

Second semester. Elective for Sophomores, Juniors, and Seniors. Assistant Professor Cady. (To be given in 1912–13.)

15. Public Speaking; Oratory

The nature and the kinds of formal oratory. Analysis of typical orations. Preparation of original orations and their frequent delivery before the class.

First semester. Elective for Sophomores, Juniors, and Seniors. Assistant Professor Cady.

16. Narration and Description

A detailed study of narrative and descriptive prose. The story will be studied from the standpoint of its structure. The writing of a certain number of short stories, of from 1500 to 2500 words, will be required of each member of the class. In connection with the course various problems arising in the teaching of English in the secondary schools will be discussed.

Second semester. Elective for Sophomores, Juniors, and Seniors. Assistant Professor Cady.

Note. Some one of Courses 13–16 is required of every student before graduation.

V. FRENCH

Assistant Professor Robinson

1. Beginners' French

Elements of the grammar; drill in pronunciation; reading and translation of easy prose; study of the irregular verbs.

First semester.

2. Beginners' French

Grammar completed; dictation exercises; easy prose continued; irregular verbs completed; free reproduction of passages read.

Second semester.

3, 4. Intermediate French

Thorough review of grammar; composition, and translation from English into French; sight translation and free reproduction. Much emphasis is laid upon the reading, in French, of easy texts; retroversion.

First and second semesters. Open to students who have had 1 *and* 2, *or their equivalent.*

5, 6. Introduction to French Literature

History of the development of the French language and literature from the Oaths of Strassburg to the twentieth century. This course is based on a manual of French literature, with lectures, library reading, and careful study of representative works of the most celebrated authors.

First and second semesters. Open to students who have had two years of French.

7, 8. French Literature in the Seventeenth Century

The classical drama—Corneille, Molière, Racine; the poetry of La Fontaine and Boileau; French prose from Descartes to St. Simon.

First and second semesters. Open to students who have had 5 *and* 6. (To be given in 1912–13.)

9, 10. French Literature in the Eighteenth Century

Montesquieu, Voltaire; Diderot and the Encyclopedists; the Revolution and its bearing on literature; Rousseau and his philosophy; Le Sage, Marivaux, Beaumarchais.

First and second semesters. Open to students who have had 5 *and* 6. (Given in 1910–11.)

11, 12. French Literature in the Nineteenth Century

The Romanticists; Realism and Naturalism; literary criticism—Chateaubriand, Sainte-Beuve, Taine; the modern drama.

First and second semesters. Open to students who have had 5 *and* 6.

13, 14. An Advanced Course in French Syntax

This course, for students planning to teach French, will

consist of a critical study of the principles of syntax and the best method of presenting these principles.

First and second semesters. Open to students who have had three years of French.

NOTE. In the Department of French, students of any class will be assigned to those courses for which, in the judgment of the instructor, they are best fitted.

VI. GEOLOGY

Assistant Professor LYFORD

1. General Geology

Dynamical Geology: a study of the atmospheric, aqueous, igneous, and organic agencies acting on and modifying the earth's surface. Structural Geology: the rocks of the earth; the structure of rock masses; stratification; dislocation and metamorphism of strata. Lectures, recitations, and laboratory work; three to five field trips.

First semester. Elective for Sophomores, Juniors, and Seniors in the Classical and Scientific Courses; required for Juniors in the Pedagogical Course.

2. General Geology

Stratigraphic and Historical Geology and Elementary Paleontology; the history of the evolution of the earth and of the organic kingdom. Lectures, recitations, and laboratory work, supplemented by four or five trips to near-by points of interest.

Second semester. Elective for those who have had 1; *required of Juniors in the Pedagogical Course.*

3. Mineralogy and Petrology

Elementary descriptive and determinate Mineralogy; blow-

pipe analysis. The microscopic examination of mineral and rock sections. Petrology, or the study of the earth's crust; texture, composition, origin, classification, and occurrence of the various classes of rocks.

First semester; two class exercises and one two-hour laboratory period each week. Elective for Juniors and Seniors who have had one year's work in Chemistry or Geology. Laboratory fee, $5.

4. Economic Geology of Vermont

The principles of Economic Geology; the origin and nature of ore deposits, mineral veins, and non-metallic products. A general survey of the economic geology of Vermont, including a discussion of the marble, granite, and slate industries, and of the production of metals. The statistics of the production of Vermont's mineral resources.

Second semester. Elective under the same conditions as 3.

5. Agricultural Geology

The soil; its origin, composition, and classification from the physical-geological standpoint. The influence of soils upon agricultural pursuits and population. Conservation of the land and its resources, including water-power. In connection with this course there will be some laboratory work on the mechanical analysis of soils. Field practice in soil plotting in connection with the topographic map; examination of power sites, and the study of the effects of erosion.

First semester. Elective for Juniors and Seniors under the same conditions as 3 *and* 4.

6, 7. Chemical Geology

Soil texture and its relation to crop production; effect of various methods of soil treatment upon texture; adaptability of soil to crop. Special qualities possessed by sandy loam, clay, clay loam, alluvial, and other types of soil. Mechanical analysis, and temperature properties of soils; movement and com-

position of soil moisture; organic constituents of soils and their specific effects.

First and second semesters. Elective for properly qualified graduate students or for students studying for honors in Geology. Laboratory fee, $5.

VII. GERMAN

Assistant Professor SKILLINGS

1, 2. BEGINNERS' GERMAN

Essentials of phonetics. Elements of grammar. Drill in pronunciation and in comprehending the spoken language. Memorizing of idioms and poems. Dictation. Reading of simple prose.

First and second semesters.

3, 4. INTERMEDIATE GERMAN

Rapid review of grammar. Reading of short stories, biography, and a text employing the spoken language. A part of the reading is done at sight. Retroversion, conversation, free reproduction, and composition based on the texts read. Dictation. Memorizing of idioms and poems. Study of synonyms and of word formation. Grammar drill.

First and second semesters. Open to those who have had 1 *and* 2, *or two years of German in preparatory school.*

5. INTRODUCTION TO GERMAN LITERATURE; PRACTICE IN WRITING GERMAN

Selections from Heine's prose and from the best known poems of Goethe, Schiller, Heine, and others. Bernhardt's *Deutsche Literaturgeschichte* is read at sight. Short themes in German. Assigned outside reading.

First semester. Open to those who have had 3 *and* 4, *or their equivalent.*

6. The Classic Period

Detailed study of two of Lessing's masterpieces and two of Schiller's, with some attention to the literary, social, and political aspects of the time and the relation of these authors and their works to the period. Each member of the course is assigned a drama of either Lessing or Schiller to be read outside the class. Reports on assigned topics.

Second semester. Open to those who have had 5.

7. Historical, Scientific, and Critical Prose

A course for those who wish training in reading, so that they may be able to consult books of reference in German and make a practical use of the language in research work. There is assigned outside rapid reading.

Second semester. (Given in alternate years with 6; omitted in 1911–12.)

8. Goethe's Life and Works

Dichtung und Wahrheit (selections), *Götz von Berlichingen*, *Egmont*, *Iphigenie*, *Hermann und Dorothea*, *Faust*, Part 1, and some of the poems are read. Lectures in German discuss the different phases of Goethe's life and his relation to his time. Assigned outside reading in Goethe's works not read in class.

First semester. Open to those who have had 5 *and* 6. (To be given in 1913–14.)

9. The Modern German Drama

Selections from the dramatic masterpieces of Kleist, Grillparzer, Hebbel, Hauptmann, and Sudermann are studied and discussed in class. Lectures in German trace the development of the drama in the nineteenth century. Each student is assigned a drama for outside reading.

First semester. Open to those who have had 5 *and* 6, *or their equivalent.*

10. A General View of German Literature

The course is designed to give a comprehensive knowledge of the great men and the leading ideas in German literature from the Middle Ages to the present. The work is based on the study of a manual, supplemented by lectures and parallel readings. A large amount of outside reading is required. The course is designed especially for those intending to teach German.

First semester. Open to those who have had 5 *and* 6, *or their equivalent.* (To be given in 1912–13.)

11. Conversation; Practice in writing German; Methods of teaching German

A course for advanced students, especially those who intend to teach the language. Assigned outside reading.

Second semester. Elective for Juniors and Seniors. (Given in alternate years; to be given in 1911–12.)

Note. In the Department of German, students of any class will be assigned to those courses for which, in the judgment of the instructor, they are best fitted.

VIII. GREEK

Professor Burrage

1. Colson's Reader; Herodotus (*Selections*)

In connection with the *Reader* and *Herodotus* there will be frequent exercises in composition, and a thorough review of forms and syntax.

First semester. A Freshman elective course.

2. Homer

The *Odyssey*. Those parts of the epic that are of most vital interest are carefully translated and studied. The ethical im-

port is carefully kept in view, and the conditions of the life described in the poem are illustrated by a consideration of archeological discoveries. Facility in reading is promoted by frequent exercises in sight translation.

Second semester. A Freshman elective course.

3. Selections from the Lyric Poets; Euripides: Iphigenia among the Taurians

An introduction to other forms of poetry than the epic, and to other kinds of meter than the dactylic hexameter. The development in poetical form from Homer to Euripides is traced. Among the authors from whom extracts are made are Archilochus, Alcaeus, Sappho, Anacreon, Simonides, and Bacchylides. In connection with the *Iphigenia among the Taurians* of Euripides, lectures are given on the origin, history, and purpose of the drama.

First semester. A Sophomore elective course.

4. Plato and Xenophon

Apology, *Crito*, selections from the *Phaedo*, of Plato; the *Memorabilia* of Xenophon. A study in the life, character, and opinions of Socrates, as he is portrayed by his two friends and disciples. Elementary statement of a few of the problems of philosophy that Socrates raised and tried to deal with. Discussion of the position occupied by Socrates and Plato in the world of philosophy.

Second semester. A Sophomore elective course.

5. Sophocles and Aeschylus

The *Oedipus Tyrannus* and *Electra* of Sophocles; the *Prometheus* and *Persians* of Aeschylus.

6. Aeschylus, Euripides, and Aristophanes

Selections from the *Oresteia* of Aeschylus; the *Medea* of Euripides; the *Frogs* of Aristophanes.

First and second semesters. A Junior-Senior elective course, alternating with 7, 8. (To be given in 1912–13.)

Courses 5 and 6 constitute between them a year's work, and give the student a fairly complete idea of the four great dramatists of Athens. They lay a good foundation for courses in the modern drama or in ethics. The external changes in the drama are carefully noted, and the growth of religious concepts is traced. The remaining plays of the authors mentioned above are read by the student in translation, and reports are required on the more important ones.

7. Plato

The *Republic*.

8. Aristotle

Ethics, Books I-IV and X.

First and second semesters. A Junior-Senior elective course, alternating with 5, 6.

Courses 7 and 8 form a year's work, and afford students of Philosophy and Ethics a chance to read in the original tongue the two masterpieces of the two greatest minds of antiquity. The charm of the *Republic* as literature will receive special emphasis, and the selections will include all the passages of startling originality.

9. Greek Thought and Literary Expression

Greek in translation. This course alternates with the course in Greek Life, and requires no knowledge of the Greek language. Extracts illustrative of the excellences of the principal Greek writers are read before the class by the instructor and criticised, and the student is expected to supplement this by extensive reading on his own part. The course and development of the Greek literature is systematically traced in lectures. Frequent tests are given to determine the progress of the class. In 1912–13 the course will be confined to the writers of prose.

Second semester. A Junior-Senior elective course. (To be given in 1912–13.)

10. Greek Life

Lectures, stereopticon talks, outside reading. For this course no knowledge of Greek is necessary. The instruction is given by means of lectures, supplemented by extensive reading on the student's part. Written tests come every two weeks. The department possesses many slides, illustrative of every phase of Greek civilization, and the Library contains the more important works on archeology. The course includes such topics as architecture, dress, education, art, and social, political, and religious ideals.

Second semester. A Junior-Senior elective course.

11. Xenophon and Homer

The *Anabasis* of Xenophon; the *Iliad* of Homer. This course is intended for students who plan to teach Greek in secondary schools. Familiarity with the style of Xenophon and Homer is promoted by copious reading. Careful distinction is made between the essentials and the non-essentials of the language, and an attempt is made to construct such a teaching scheme as will both save the pupil's time and maintain his interest. The leading text-books are compared and criticised. Methods of teaching vocabulary, grammar, reading at sight, and translation are discussed.

First semester. An elective course open to all who have pursued Greek two years in College.

12, 13. Beginners' Greek

A course for those who have never studied Greek, yet wish to take Greek in College. During the first semester the elements of the language are acquired from some one of the First Greek Books. In the second semester, portions of the first four books of the *Anabasis* are read, together with easy selections of more general interest. The course must be con-

tinued through the two terms, and should fit the student to take up the regular Freshman Greek the following year.

First and second semesters. Elective for any class.

IX. HISTORY

Professor HOWARD
Assistant Professor WETHERELL
Assistant Professor WHITE
Assistant Professor MORGAN

1. MEDIEVAL EUROPEAN HISTORY

Outline of Western Europe from the fall of the Western Roman Empire to the beginning of the sixteenth century. Courses 1 and 2 cover periods of peculiar importance. They are considered fundamental to all later work in history, and are also valuable in preparation for many courses in other departments. They will be made as broad as time allows.

First semester. Elective for Freshmen in the Classical and Scientific Courses; required in the Pedagogical Course. Assistant Professor MORGAN.

2. MODERN EUROPEAN HISTORY

A continuation of 1 from the beginning of the sixteenth century to the present time. This course should lead to a good understanding of the problems of present-day Europe. The part taken by England in modern history will be made prominent, and connections with American history will frequently be pointed out.

Second semester. Elective for Freshmen. Assistant Professor MORGAN.

3. AMERICAN HISTORY TO 1776

A broad outline which may be taken as an end in itself,

or as a basis for more intensive work. A good preliminary knowledge of European—especially English—history is very desirable.

First semester. Elective for Sophomores and Juniors. Assistant Professor WETHERELL.

NOTE. In connection with the various electives in American History, attention is called to the closely related Political Science Courses, 5a and 5b.

4. AMERICAN HISTORY, 1776–1815

A continuation of 3.

Second semester. Elective for Sophomores and Juniors. Assistant Professor WETHERELL.

5. AMERICAN HISTORY, 1815–1861

Similar to 3 and 4 in scope and treatment.

First semester. Elective for Sophomores and Juniors. Assistant Professor WETHERELL. (To be given in 1912–13.)

6. AMERICAN HISTORY FROM 1861

A continuation of 5.

Second semester. Elective for Sophomores and Juniors. Assistant Professor WETHERELL. (To be given in 1912–13.)

7. THE EXPANSION OF THE AMERICAN PEOPLE TO 1840

An advanced consideration of a phase of American history for students well acquainted with the general subject. Geography and history are closely correlated. The course includes studies of the physical geography and primitive condition of America; European colonization as influenced by natural conditions; the shifting of the frontier from the Atlantic toward the West, with reasons for particular variations; effects of the struggle with New World conditions on the European settlers' ideas and institutions; successive stages

of life left by advancing frontiers; stranded and isolated frontiers; acquisitions of territory; geographic areas and sectionalism; local and national problems growing out of expansion; and, in general, the moulding effects on the nation's life of the conquest of a continent.

First semester. Elective for Juniors and Seniors. Assistant Professor WETHERELL.

8. THE EXPANSION OF THE AMERICAN PEOPLE FROM 1840

A continuation of 7.

Second semester. Elective for Juniors and Seniors. Assistant Professor WETHERELL.

9. AMERICAN DIPLOMATIC HISTORY

A general outline, to which each student will add detailed knowledge concerning assigned topics derived from independent work in the Library.

First semester. Elective for Juniors and Seniors. Assistant Professor WETHERELL. (To be given in 1912–13.)

10. AMERICAN POLITICAL HISTORY SINCE 1877

Similar to 9 in treatment.

Second semester. Elective for Juniors and Seniors. Assistant Professor WETHERELL. (To be given in 1912–13.)

11. THE TEACHING OF HISTORY

Some of the topics treated are the nature and essential elements of history; relations of history to other subjects; forms in which historical materials are found, with methods of criticising and using sources in the writing of history; personal values of the study of history; the general preparation of the teacher and the place of methods; bibliography of standard authorities in American History; working school-libraries; source-books; text-book criticism; elementary and advanced phases of history teaching, and the organization of

historical knowledge, involving tests of comparative values. The course is planned not only to give the prospective teacher a broader knowledge of the history instructor's problems, but also to introduce him to the literature of his subject, both text and professional.

First semester. Elective for Juniors and Seniors. Assistant Professor WETHERELL.

12. ANCIENT HISTORY

A survey of the development of ancient civilization, with especial emphasis on the history of Greece and Rome. Much attention will be paid to the use of sources, as being of extreme importance in supplying the proper view-point and stimulus, especially to those who are to teach the Ancient History required in high schools.

Second semester. Elective for Juniors and Seniors. Assistant Professor WHITE.

X. LATIN

Professor SANFORD
Assistant Professor WHITE

1. LIVY

For formal translation such chapters of Livy, Books XXI-XXXIX, are selected as to constitute a fairly comprehensive story of the second Carthaginian war from its beginnings to the defeat at Zama. Library readings on the characteristics of Roman and Carthaginian, the nature of the struggle, and the importance of the results of the war are assigned. Written tests in sight reading are from Livy and other historians. The method of question and answer in Latin gives the student a direct knowledge of simple form and syntax. During the semester there are required about twenty prose exercises based upon the text translated. These exercises include a thorough review of the more elementary principles of Latin writing,

much practice in the handling of verb forms, and a study of the development and use of cases.

First semester. Required of A.B. Freshmen. Assistant Professor WHITE.

2. CICERO

Selections from the *Letters*. In order to promote correctness in translation and fluency of rendering the Latin period, several written tests in sight translation are given, in which the papers presented are commented upon by the instructors in both the English and the Latin departments. The historical outline takes up the story at the time of the struggle between Republic and Empire and runs contemporaneously with the fortunes of Caesar and Cicero as written in the *Letters*. In order to further familiarize the student with the language as living and in action, part of the recitation work will be conducted in Latin. Weekly exercises in prose deal largely with the subject of the development, history, and use of mood.

Second semester. Required of A.B. Freshmen. Assistant Professor WHITE.

3. TACITUS*

The *Germania* and *Agricola*. Comparison of the style of Tacitus with that of other writers of his time. A study of the Roman colonial system. Outline of the history of the later Empire, with brief investigation into the subject of the influence of Rome on the northern tribes and, incidentally, our own inheritance of law and custom from them. Library reading and the study of photographs of Roman remains in Germany and England.

First semester. Elective for Sophomores who have had 1 *and* 2. Professor SANFORD.

4. HORACE*

Selected *Odes* and *Epodes*. By comparison of the odes with

* In 1911–12, Courses 3 and 4 are given in reverse order.

lyrics in Latin and other languages the class attempts to estimate the place of Horace among the poets. The debt of English poetry to Horace is continually referred to, and borrowed or suggested phrases, imitations, and translations in our own lyrics are daily sought in illustration. Very careful preparation of note-books is required.

Second semester. Elective for Sophomores who have had 1 *and* 2. Professor SANFORD.

5. ROMAN COMEDY

The translation of the *Captivi* of Plautus, and the *Andria* of Terence, with rapid examination of other comedies.

First semester. Elective for Seniors and Juniors. Professor SANFORD. (To be given in 1912–13.)

6. A STUDY IN LATIN LYRICS

Fragments preserved from the early writers are quoted to point out the beginnings of poetry. Selections from Catullus, Horace, Vergil, Ovid, Tibullus, Propertius, and others are read to show the Latin lyric in its perfection. A few poems of the Silver Age are given to indicate the changes of form and style to medieval and monkish rhymes. The hymnology of the early Church.

First semester. Elective for Seniors and Juniors. Professor SANFORD.

7. PLINY

Selections from the *Letters*. The course is intended to give practice in rapid reading. Comparison of the *Letters* with the correspondence of Cicero and others. Lectures on the book-making and letter-writing of the Romans.

Second semester. Elective for Seniors and Juniors. Professor SANFORD. (To be given in 1912–13.)

8. ROMAN ORATORY

The history of Roman oratory and the preparation of the

Roman orator for his profession, as derived from a study of Cicero's *Brutus* and Quintilian's *Institutions X*. Of particular interest to those who intend to teach Cicero's orations in the secondary schools, as well as historically instructive to students of oratory and public speaking.

First semester. Elective for Seniors and Juniors. Assistant Professor WHITE.

9. A STUDY IN ROMAN PHILOSOPHY

Readings from the *Tusculan Disputations* of Cicero, *De Rerum Natura* of Lucretius, with extracts from Seneca, Marcus Aurelius, and Boethius.

Second semester. Elective for Seniors and Juniors. Professor SANFORD. (To be given in 1912–13.)

10. ROMAN ARCHEOLOGY

Lectures on the topography of Italy, and the buildings and statuary of Ancient Rome. Readings on various topics from Middleton, Lanciani, Jordan, Parker, Burn, Hülson, Platner, and the journals are required, with careful preparation of notebooks. Illustrations are by photographs, the Canina, Piranesi, and Niccolini plates, and stereopticon views. The course is intended as a background for the study of advanced Latin, and should be elected by all those intending to pursue the subject further.

First semester. Elective for Seniors and Juniors. Professor SANFORD. (To be given in 1912–13.)

11. ADVANCED LATIN PROSE

An investigation of vocabularies found in prominent Latin authors of both prose and poetry; a comparison of the periodic sentence with the loose structure of the English; examination of the diction of the authors used in the preparatory work; the writing of detached sentences and of connected discourse.

First semester. Elective for Seniors and Juniors. Professor SANFORD.

12. THE TEACHING OF PREPARATORY LATIN*

A study of methods and authors used; the relative value of vocabularies, grammatical drill, and sight reading; examination of text-books; Caesar and the substitute authors; the incidental study of the Latin element in English speech, with rapid examination of the vocabularies of Milton, Shakespeare, and others; Grimm's law; alternate drifts toward the Latin and toward the Saxon forms; colloquia; tests; the necessity of making Latin a live language; quality versus quantity; literary appreciation.

Second semester. Elective for Seniors and Juniors. Professor SANFORD.

13. VERGIL

The reading of selections from the *Aeneid*, the *Eclogues*, and the *Georgics*, a study in literature rather than syntax; Vergil's personality and peculiar fame; his place among the world's poets; the debt of our own literature to the *Aeneid.*

Second semester. Elective for Seniors and Juniors. Professor SANFORD. (To be given in 1913–14.)

14. OUTLINES OF ANCIENT AND MEDIEVAL ART

The buildings, the statuary, and the painting of the Egyptians, the Assyrians and Babylonians, the Greeks, and the Romans; the mission of the Greeks to the later nations in art; the skilful adaptation of the Romans from the models of all the previous schools; the development of early and medieval Italian art; Michael Angelo; Raphael. Illustrated by stereopticon and reflectoscope.

First semester. Elective for Seniors and Juniors. Professor SANFORD. (To be given in 1912–13.)

* In 1911–12, given in first semester.

15. Outlines of Latin Literature

A review of all the authors from Ennius to Boethius; reading of translations; an attempt to form an estimate of the place and value of the literature as a whole, and the tendencies toward appreciation and depreciation at the present time; the passing of the Latin into the Italian, the French, and the other Romance languages; the jingles and the rhymes of the monks; attempts to revive the vernacular.

First semester. Elective for Seniors and Juniors. Professor Sanford. (To be given in 1913–14.)

XI. MATHEMATICS

Assistant Professor Cresse

1. Solid Geometry

Books VI, VII, and VIII, Wentworth's *Solid Geometry*. Lines, planes, and angles in space; polyhedrons; cylinders and cones; the sphere and spherical triangles. The solution of numerous original exercises, including loci problems. Application to the mensuration of surfaces and solids.

First semester. Required of all Freshmen, except in the Pedagogical Course.

2. Algebra

Theory of equations; undetermined coefficients; binomial theorem; logarithms; permutations and combinations; probability; determinants.

Second semester. Required of all Freshmen, except in the Pedagogical Course.

3. Plane and Spherical Trigonometry

Trigonometric functions of angles in general; proofs of the principal formulas with examples on trigonometric transfor-

mations; inverse trigonometric functions; logarithms, their properties and applications; solution of right and oblique triangles; solution of right and oblique spherical triangles; applications of spherical trigonometry.

First semester. Required of B.S. Sophomores.

4. Plane and Solid Analytic Geometry

Loci and their equations; transformation of coördinates; discussion of equations of the straight line, circle, parabola, ellipse, and hyperbola; the elements of solid analytic geometry, including a study of the point, the plane, simple surfaces of revolution, and conicoids.

Second semester. Required of B.S. Sophomores; elective for A.B. Sophomores who have completed 3.

5. Differential Calculus

Differentiation of functions; differentials and infinitesimals; series; expansion of functions; indeterminate forms; maxima and minima of functions of one independent variable; partial differentiation; maxima and minima of functions of two or more variables; direction of curves; tangents and normals; direction of curvature; points of inflection; curvature; radius of curvature; evolute and involute.

First semester. Elective for students who have completed 4.

6. Integral Calculus

Integration of standard forms; integration of rational fractions; special methods of integration; definite integrals; application of integrations to plane curves and certain volumes; multiple integration, with applications to the surface, volume, and moment of inertia of any solid; also to center of gravity, pressure of fluids, and force of attraction.

Second semester. Elective for students who have completed 5.

7. Differential Equations

A problem course in ordinary equations of the first order,

ordinary linear equations of higher order, systems of ordinary equations of the first order and first degree, linear partial equations of the first order. "Standard forms." Throughout the course emphasis is placed on the geometric meaning and physical application of the equations.

First semester. Elective for students who have completed 6.

8. Mathematical Analysis

A reading and problem course. Convergence and evaluation of definite integrals, and of infinite series; transformations; elements of differential geometry.

Second semester. Elective for students who have completed 7.

XII. PEDAGOGY

Professor Collins
Professor McFarland

1. Principles of Education

A general introduction to Pedagogy, designed especially for students who have not taken the Pedagogical Course. Course 1 may be followed by Course 6, 12, or 14. Text-book: Bolton's *Principles of Education.*

First semester. Elective for Juniors and Seniors. Professor Collins.

2. Educational Psychology

Ways of studying mental phenomena; the nervous system and its functions; the dawning of conscious life in a child; the development of senses and their part in education; types of normal psycho-physical activity; the steps in mental development; the period of adolescence; the psychological basis of method; how to study and how to teach.

Second semester. Required of Freshmen in the Pedagogical

Course; elective for A.B. and B.S. Sophomores, Juniors, and Seniors. Professor COLLINS.

3. HISTORY OF EDUCATION IN EUROPE

Educational views and customs in ancient, medieval, and modern times. Education in the Homeric period; school life in old Greece; the new Greek education; early Roman education; Graeco-Roman schools and schoolmasters; the training of the early Christians; the decline of classical learning; the rise of church control; the schools of the monasteries; scholasticism; the universities of the Middle Ages; medieval student life; the educational significance of the Renaissance and the Reformation; the genesis of modern educational ideas and ideals. Text-books: Monroe's *Brief History of Education;* Painter's *Great Pedagogical Essays.*

First semester. Required of Sophomores in the Pedagogical Course; elective for A.B. and B.S. Sophomores, Juniors, and Seniors. Professor COLLINS.

4. AMERICAN EDUCATION

Elements of American educational history. The evolution of the American school system, in its elementary, secondary, and collegiate features. These are traced from their colonial beginnings in transplanted European ideas, through their various modifications in colonial times, the Revolutionary era, and the period of national expansion and development. Text-book: Brown's *The Making of our Middle Schools.*

Second semester. Required of Sophomores in the Pedagogical Course; elective for A.B. and B.S. Sophomores, Juniors, and Seniors. Professor COLLINS.

5. INTRODUCTION TO EDUCATIONAL THEORY

The meaning, scope, and aims of education in their individual and social aspects; the bases of education; educational values; the educative process; the principles of teaching.

First semester. Required of Juniors in the Pedagogical Course;

elective for A.B. and B.S. Juniors and Seniors. Professor COLLINS.

6. INTRODUCTION TO TEACHING

Elements of general method; the method of recitation; the organization and management of secondary schools. Observation and reports.

Second semester. Required of Juniors in the Pedagogical Course; elective for A.B. and B.S. Juniors and Seniors. Professor MCFARLAND.

7, 8. PRACTICE TEACHING

Teaching in high school under supervision for one semester. The students of the Pedagogical Course will be divided for this purpose into two sections before the completion of 6. Students of Division I will elect 7 as a three-hour course for the first semester and will receive teaching appointments accordingly, and students of Division II will elect 8 and receive similar appointments for the second semester. Observation will be prescribed at the discretion of the instructor, to precede, accompany, and follow the teaching appointments.

First and second semesters. Required of Seniors in the Pedagogical Course. Professor MCFARLAND.

9, 10. SUPERVISION

The administration and supervision of public schools. The course is designed for those intending to become supervisors or superintendents, and is open only to those who possess qualifications to undertake such work.

First and second semesters. Elective for Seniors in the Pedagogical Course. Professor COLLINS.

11. HYGIENE OF EDUCATION

Adolescence and its needs; bodily growth and development; physical factors of the school that relate to the growing period of youth.

Second semester. Elective for Juniors and Seniors. Professor McFARLAND.

12. SECONDARY EDUCATION: STUDIES IN SPECIAL METHOD

The exact sciences, mathematics, physics, and chemistry, or the biological and earth sciences.

Second semester. Elective for Seniors. Professor McFARLAND.

¶

For students who wish to fit themselves for teaching or supervising, further specialization is provided for by the coöperation of other departments in offering courses helpful to teachers, such as:

Greek Thought and Literary Expression: *Course* 9.
Greek Life: *Course* 10.
Methods in the Teaching of Preparatory Greek: *Course* 11.
Methods in the Teaching of Preparatory Latin: *Course* 12.
Outlines of Ancient and Medieval Art: *Course* 14.
Methods in the Teaching of English: *Course* 16.
Methods in the Teaching of German: *Course* 11.
Methods in the Teaching of French: *Courses* 13, 14.
Modern European History (*propaedeutic to the* History of Education): *Course* 2.
American Colonial History (*propaedeutic to* American Educational History): *Course* 3.
Methods in the Teaching of History: *Courses* 11, 12.

XIII. PHILOSOPHY

Assistant Professor CUNNINGHAM

1. General Psychology

Introductory study of the fundamental problems of normal psychology. The nature and methods of the science; elementary conscious states; complex processes. Reading in text supplemented by experiments, the results of experiments to be entered in note-books and reported to the instructor from time to time.

First semester. Elective for Sophomores, Juniors, and Seniors.

2. Logic

An introductory course in formal logic. Both the deductive and the inductive aspects of thought are considered. Nature and rules of the syllogism; moods; figures; fallacies; problem and methods of induction; nature and laws of thought.

Second semester. Required of all Sophomores.

3. General Ethics

General introductory course to ethical problems. Study of the development of moral ideals and ethical principles. Discussion of some of the more important theories that have been advanced for the solution of ethical problems.

First semester. Elective for Juniors and Seniors.

4. Advanced Ethics

A more detailed investigation of ethical problems. Reading of the ethical writings of Kant, Mill, Bentham, Green. Essays dealing with such problems as the standard of moral action; the nature and problems of ethical science; conscience; the moral law; the feeling of obligation; moral knowledge.

Second semester. Elective for Juniors and Seniors.

5. History of Philosophy and Ethics

General survey of the development of ethical, scientific, and philosophical conceptions from the sixth century B.C. to the beginning of the modern era. The course begins with the Greeks, and deals in some detail with the Greek period, attention being fixed primarily upon Socrates, Plato, and Aristotle. The period of the Middle Ages is passed over more rapidly, but enough time is devoted to it to enable the student to grasp the different tendencies of the period. Lectures, assigned readings, reviews, and essays.

First semester. Elective for Sophomores, Juniors, and Seniors.

6. History of Philosophy and Ethics

Continuation of 5. The course deals in some detail with the Rationalists, Empiricists, the Enlightenment, Kant, Fichte, Schelling, Hegel. Post-Hegelian tendencies are indicated and the present status of philosophical and ethical inquiry outlined as far as time will allow. Lectures, assigned readings, reviews, essays.

Second semester. Elective for Sophomores, Juniors, and Seniors.

7. Kant

This course is designed to acquaint the student with the fundamental principles of the system of Immanuel Kant. A somewhat exhaustive study of the *Critique of Pure Reason* will be undertaken; the *Critique of Practical Reason* will be dealt with less thoroughly, but in sufficient detail to give the student a just appreciation of the system as a whole.

First semester. Elective for Juniors and Seniors.

8. Metaphysics

This course is designed to bring the student face to face with the fundamental problems of experience, and to encourage in him the spirit to grapple with them. The course aims to be constructive, the effort being made to work out a consistent

theory of the world. Frequent references are made to the various metaphysical theories, and so the student is brought into touch with what the greatest minds have thought concerning these problems. Course 7 will prove a very valuable introduction to this course.

Second semester. Elective for Juniors and Seniors.

9. Advanced Psychology

Detailed studies of attention, memory, imagination, association of ideas, and the emotions. Extensive reading in psychological literature bearing on these subjects. Frequent reports and discussions.

First semester. Elective for students who have had 1. (To be given in 1913–14.)

10. Studies in Pessimism

This course deals rapidly with the pessimism of the Greeks, and then, in a more detailed manner, turns to the views of the great German pessimists, Schopenhauer and Nietzsche. The influence of these writers upon the literature of the nineteenth century. Parallel readings and essays.

Second semester. Elective for Juniors and Seniors. (To be given in 1913–14.)

11. History of Religion

Historical survey of the development of religion from its lowest manifestations. Such phenomena as animism, totemism, fetishism, ancestor-worship, sacrifice, prayer, magic, and so forth, will be studied in their historical setting. The fundamental tenets of the principal national religions, such as the religions of Greece, of Rome, of Israel, Brahmanism, Buddhism, Christianity, Confucianism, Mohammedanism, will also be investigated.

First semester. Elective for students who have had 1. (To be given in 1912–13.)

12. Philosophy of Religion

Psychological and philosophical interpretation of the facts revealed in 11. The basis and meaning of religion as an outgrowth of the development, and the expression of the life, of the human race. Inquiry concerning the final claims of the several national religions.

Second semester. Elective for students who have had 11. (To be given in 1912–13.)

XIV. PHYSICS

Professor Bryant

1. General Physics

Fundamental principles of kinematics; simple harmonic motion; inertia; gravitation; work and energy; elasticity; properties of liquids and gases; waves; sound; theory of heat; calorimetry; transference of heat; thermal expansion; change of state; nature of heat.

First semester. Elective for Sophomores in the Classical Course; required of Freshmen in the Scientific Course and elective for Freshmen in the Pedagogical Course.

2. General Physics

A continuation of 1. *Magnetism:* the earth's magnetic field; magnetic induction; electrostatic induction, potential, and capacity; production of electric currents; electromotive force; electrical resistance; measurement of current; chemical, heating, and magnetic effects of the electric current. *Light:* reflection, refraction, interference, diffraction, and polarization of light waves, and spectrum analysis.

Second semester. Elective for Sophomores in the Classical Course; required of Freshmen in the Scientific Course and elective for Freshmen in the Pedagogical Course.

3. Light

An advanced course, intended for those students who wish a more extended knowledge of this subject than can be obtained from the course in General Physics. The laws of reflection and of refraction, with their application to optical instruments; the wave theory of light; the spectrum and its teachings; the phenomena of radiation, absorption, dispersion, interference, and diffraction are some of the topics considered.

First semester. Elective for students who have completed 1 *and* 2.

4. Electricity and Magnetism

An advanced course covering more thoroughly many of the topics studied in the corresponding work in General Physics, together with some additional topics such as the discharge of electricity through gases, electrons, radio-activity, and wireless telegraphy.

First semester. Elective for students who have completed 1 *and* 2. (To be given in 1912–13.)

5. Physical Measurements

Elementary theory and practice of physical manipulation. Laboratory work in the measurements of length, mass, time, velocity, linear and angular acceleration; the verification of the laws of equilibrium of forces; the determination of coefficients of elasticity; the density of solids, liquids, and gases; experiments in sound. In this course and in 6 a complete record of every experiment, giving the apparatus used, the measurements taken, and the results obtained, is required of every student. Frequent lectures and quizzes are introduced to insure a thorough understanding of the principles which underlie the different experiments.

First semester. Elective for students who have completed 1 *and* 2. *Laboratory fee*, $5.

6. Physical Measurements

A continuation of 5. The student is expected to have acquired such facility in the manipulation of apparatus and such ability to grasp the laboratory method of ascertaining physical laws as will enable him to perform accurately and intelligently the more difficult experiments in heat, light, electricity, and magnetism. Measurements are made of thermal expansion, specific heat, latent heats of fusion and of evaporization. In electricity, fields of force, electric resistance, electromotive forces, and strengths of current are measured. The laws of reflection and refraction of light waves, the formation of images by mirrors and lenses are studied, and indices of refraction and lengths of light waves are measured.

Second semester. Elective for students who have completed 5. *Laboratory fee*, $5.

7. Astronomy

The celestial sphere; astronomical instruments; determination of latitude, longitude, and time; the earth as an astronomical body; the moon's motions and physical characteristics; the sun's physical characteristics; revelations of the spectroscope; eclipses; planets; comets; stars and nebulae.

Second semester. Elective for Juniors and Seniors.

XV. POLITICAL AND SOCIAL SCIENCE

Professor Howard
Assistant Professor Wetherell
Assistant Professor Morgan

1. Principles of Economics

A general course for beginners. Its purpose is to afford a systematic survey of the field of economics. Recitations and discussions.

First semester. Elective for Sophomores, Juniors, and Seniors. Assistant Professor MORGAN.

2. RAILWAY TRANSPORTATION

A brief examination is made of the growth of corporations in general, their organization and financiering. A special study is made of railway organization in the United States, traffic management, railway taxation, and state regulation of railways. Lectures, recitations, and written reports.

Second semester. Elective for students who have completed 1. Assistant Professor MORGAN.

3. MONEY, CREDIT, AND BANKING

Monetary theory, credit instruments, and the monetary experience of the United States; the theory of banking, followed by a study of the banking systems of the United States and the leading European countries.

First semester. Elective for Juniors and Seniors who have completed 1. Assistant Professor MORGAN.

4. PUBLIC FINANCE

Public expenditures and revenues, with special emphasis on the principles of taxation. An examination is made of American and European tax systems. Lectures, recitations, and written reports.

Second semester. Elective for Juniors and Seniors who have completed 1. Assistant Professor MORGAN.

5a. THE ENGLISH GOVERNMENT

A description of the present working English government, together with sketches of historic development and comparisons with the leading governments of continental Europe. A good knowledge of general English history—as much as may be gained in History 1 and 2—is taken for granted. This course furnishes a very desirable introduction to the course in

American Government. Together they lay the basis for the more detailed and technical courses in the department.

First semester. Elective for Sophomores and Juniors. Assistant Professor WETHERELL.

5 b. THE AMERICAN GOVERNMENT

A rapid survey of the whole field — national, state, and local. Descriptive, with sketches of historical development. A good knowledge of American history is assumed.

Second semester. Elective for Sophomores and Juniors. Assistant Professor WETHERELL.

5 c. AMERICAN CONSTITUTIONAL LAW

An advanced and somewhat technical course, in preparation for which as much knowledge of government as may be obtained from 5 a and 5 b is considered essential.

Second semester. Elective for Seniors. Assistant Professor WETHERELL.

6. INTERNATIONAL LAW

The history and general growth and development of international law. General principles; study of treaties and celebrated cases; reading of diplomatic correspondence in international controversies; progress in international arbitration; modern usage in war on land and sea; discussion of new problems. Recitations and library work.

Second semester. Required of all Seniors. Professor HOWARD.

7, 8. ELEMENTARY LAW

A study of Blackstone's *Commentaries on the Common Law.* The fundamental principles of the elementary law; definitions; selected topics most useful to the American student of law.

First and second semesters. Elective for Juniors. Professor HOWARD.

9. Contracts and Commercial Law

A course largely professional on the essentials and structure of contracts and the nature and legal effect of bills, notes, and other commercial paper.

First and second semesters. Elective for Seniors. Professor Howard.

10. Roman Law

An introduction to the science of jurisprudence, designed to familiarize the student with its literature and terminology. Examination of the *Institutes* of Justinian.

Second semester. Alternating with 11. *Elective for Juniors and Seniors.* Professor Howard.

11. Elements of American Law

Nature and authority of law; status; public and municipal corporations; private corporations; rights, duties, wrongs, and remedies; interpretation of law; courts; fictions and presumptions.

Second semester. Alternating with 10. *Elective for Juniors and Seniors.* Professor Howard. (To be given in 1912–13.)

12. Sociology

A study of race characteristics; heredity; defectives and degenerates; poverty and crime, their causes, prevention, and cure.

Second semester. Elective for Seniors. Assistant Professor Morgan.

Note. Courses 5a, 5b, 5c, 6, 7, 8, 9, 10, and 11 together constitute the equivalent of a year's work in a law school, and arrangements have been made with leading law schools for the allowance of credit for them toward the work required for the degree of Bachelor of Laws.

THE WOMEN'S COLLEGE

IN CONNECTION WITH MIDDLEBURY COLLEGE

CAROLINE CRAWFORD, Dean

IN 1883 Middlebury College opened its doors to women, and offered to them the same courses and privileges afforded to men. In 1902 a charter was granted for an affiliated College for Women, and steps have been taken toward two coördinate institutions, one for men and one for women, as fast as resources have allowed. It is believed that both men and women are better for the distinct social life of a separate College, but that the greater economy in administration and instruction when the education of both sexes is conducted under the same corporate management and by the same Faculty justifies affiliated institutions in the same location.

The President and Fellows of Middlebury College exercise full supervision and control of the Women's College. They are authorized to receive gifts of money for scholarships and professorships for the benefit of women students, for buildings for women, and for the general purposes of the Women's College. Bequests, legacies, and gifts for the education of women in connection with Middlebury College, like those intended for any other department of the College, should be made payable to "The President and Fellows of Middlebury College."

Women in Middlebury are taught by the same Faculty as men, and enjoy precisely the same privileges

in the Library and Laboratories. All studies of the Classical and Pedagogical Courses are open to them, with the same freedom of election, and they have equal opportunities in the Department of Pedagogy established by the State.

The Dean seeks to be the friend and adviser of each woman in College. The social activities of the women are under her direction.

Pearsons Hall, completed in 1911 with a portion of the D. K. Pearsons Fund of $100,000, accommodates, with Battell Cottage, about 100 women. The College will provide residence for women, except where special permission is obtained to reside elsewhere.

The requirements for admission to the Women's College are the same as those for men in the Classical and Pedagogical Courses. Women are accorded the degree of A.B. upon graduation and may attain the degree of A.M. Separate chapel exercises are maintained for them, and separate recitations in most of the required work of the first two years. Correspondence connected with the Women's College should be addressed to the Dean of Women.

Special courses for women are offered in Physical Education and Art, and in Home Economics.

PHYSICAL EDUCATION AND ART

Assistant Professor CRAWFORD

1, 2. THE ARTS OF MOVEMENT

The earliest forms of the social arts—the festival, music, poetry. Their development as modes of expression and their

value in the promotion of human ideals and culture. Practical exercises in the gymnasium.

First and second semesters; twice a week. Required of all Freshmen and Sophomores.

3. The Social Function of Art

A study of the origin and evolution of the festival, sculpture, the drama, painting, poetry, and music, in their relation to social progress. The relation of the arts to social life. The function of art in the life of the community. The cultural value of festivals, pageants, and dramas.

First semester. Elective for Juniors and Seniors.

4. The Function of the Family

The origin and evolution of the family. The work of women in relation to social progress. The function of women in the development of the religious, artistic, and industrial life of the community. The relation between the arts and social evolution.

Second semester. Elective for Juniors and Seniors.

HOME ECONOMICS

Assistant Professor Gerould

1. Food: Its Selection and Preparation

The classification, composition, and study of food; its nutritive and economic values and functions. The fundamental principles involved in the application of heat to food constituents, and the various processes and temperatures applied in its preparation. Lectures, recitations, and laboratory work.

First semester. Elective for Juniors. Laboratory fee, $5.

2. Household Economics

Food products, their manufacture, adulteration, and preser-

vation. The hygienic care of foods; the result of "pure food" laws. The preparation, serving, and cost of meals. A continuation of 1.

House sanitation, including the location of a house, drainage, water supply, filters, heating and ventilation, cleaning and ventilation.

Second semester. Elective for Juniors who have completed 1. *Laboratory fee*, $5.

3. Dietetics

The principles of nutrition, and their application under varying conditions; the nutritive function of proteins, fats, and carbohydrates; the function of food accessories. The chemistry and physiology of digestion. Practical work in invalid, chafing-dish, and more advanced cookery.

First semester. Elective for Seniors who have completed 1 *and* 2. *Laboratory fee*, $5.

4. Household Management

Organization of the household; the division of the income; the buying of supplies; household furnishing and decoration; care of the house. Laboratory work in advanced cookery.

Second semester. Elective for Seniors who have completed 3. *Laboratory fee*, $5.

5. Sewing

This course presupposes some knowledge of elementary sewing. The designing, drafting, and making of undergarments and simple lingerie dresses will be taught. Material will be provided by the students.

Second semester; three laboratory periods a week. Elective for Seniors.

6. Methods of Teaching

This course will be given as a supplement to 4 and 5, in the second semester. Methods and outlines for teaching cooking

and sewing in elementary and secondary schools will be discussed; and, if feasible, practice classes in both subjects will be arranged.

In addition to the courses outlined, it will be necessary for the student who wishes to teach to pursue courses in Chemistry, Physics, Biology, Bacteriology, Physiology, and Hygiene.

THE SUMMER SESSION

EDWARD D. COLLINS, Director

MIDDLEBURY College held its third Summer Session July 5 to August 11, 1911, and presented the following courses of instruction:

1. Principles of Education	*Professor* McFarland
2. Seminar in Education	*Professor* McFarland
3. Systematic Ethics	*Assistant Professor* Cunningham
4. Memory and Attention	*Assistant Professor* Cunningham
5. Vergil	*Assistant Professor* White
6. Roman Oratory	*Assistant Professor* White
7. Roman Architecture	*Professor* Sanford
8. High School English	*Assistant Professor* Cady
9. The Novel	*Assistant Professor* Cady
10. Beginners' German	*Miss* Helen May Knox
11. Elementary German	*Miss* Knox
12. German Prose	*Mr.* Edward Everett Thompson
13. German Conversation	*Mr.* Thompson
14. How to teach German	*Miss* Knox
15. Beginners' French	*Assistant Professor* Robinson
16. Elementary French	*Assistant Professor* Robinson
17. Intermediate French	*Mr.* Martin Bähler
18. Advanced French	*Mr.* Bähler
19. Seminar in French	*Assistant Professor* Robinson
20. American History	*Assistant Professor* Wetherell
21. Seminar in History	*Assistant Professor* Wetherell
22. Shakespeare	*Assistant Professor* Cady
23. Cicero	*Assistant Professor* White
24. Forestry	*Professor* Burt
25. Fungi causing Plant Diseases	*Professor* Burt
26. Elementary Physics	*Mr.* Garfield Minot Weld
27. Advanced Physics	*Mr.* Weld
28. Elementary Chemistry	*Mr.* Silas Alpha Lottridge *and* *Miss* Gertrude F. Brittain
29. Advanced Chemistry	*Mr.* Lottridge
30. Photography	*Mr.* Lottridge
31. College Algebra	*Mr.* William B. Cook
32. Plane Geometry	*Mr.* Archie S. Harriman
33. Trigonometry	*Mr.* Cook
34. Religious Education and the Bible	*Professor* McFarland *and Dr.* Charles E. Hesselgrave

35. Biblical Criticism	*Dr.* Hesselgrave
36. Religion of the Old Testament	*Dr.* Hesselgrave
37. The Life of Jesus according to the Gospel of Mark	*Dr.* Hesselgrave
38. Elementary Algebra	*Mr.* Harriman
39. College Entrance Algebra	*Mr.* Harriman
40. Intermediate Algebra	*Mr.* Cook
41. Metal Craft	*Miss* Anne May Pierce
42. Drawing	*Miss* Mabel B. Hall
43. Domestic Science	*Miss* Emma B. Matteson
44. Vocal Music	*Mr.* Frank H. Shepard
45. Voice Culture	*Mr.* Shepard
46. The Speaking Voice	*Mr.* Shepard
47. Solid Geometry	*Mr.* Cook

Other work than that covered by these courses was accomplished by individual students, some working independently, others under direction of members of the Summer Session Faculty. Model classes of children were formed in drawing and in clay-modeling. Chorus singing was regularly practised. Students of piano and voice were received in the professional school of music conducted by Mr. Frank H. Shepard of Orange, N. J. The names of Summer Session students will be found on pages 134 to 136.

Announcement. The fourth Summer Session will be held from July 2 to August 9, 1912. The College laboratories, libraries, halls of residence, and dining hall will be open, with increased facilities. The work of the Session of 1912 will emphasize academic courses of collegiate and advanced grade, without lessening the advantages hitherto enjoyed in arts and crafts. An abundance of work will be provided leading to the degrees of A.B., B.S., A.M., and M.S. There will also be adequate provision for the needs of individuals who wish to pursue some chosen line of work or reading less intensively, for purely cultural purposes.

Examinations are not required for entrance; but credits toward degrees or for admission to College will not be given unless work is pursued with regularity and completed with satisfactory examinations. Students are not required to be candidates for credits, however. The satisfactory completion of each full course for credits confers upon the candidate two credits toward a degree; a total of six is permissible at any session.

By reason of accessibility, the facilities afforded by the College, the delightful climate, the large proportion of the regular Faculty who remain to instruct, the spirit in which the work is conducted, and the slight financial burden imposed, the Summer Sessions of Middlebury College provide an unusually attractive meeting place for teachers and students of educational, social, and religious problems.

The February number of the Middlebury College Bulletin will be a prospectus of the Summer Session of 1912. Send applications for this number to The Director, Summer Session, Middlebury, Vt.

GENERAL INFORMATION

HISTORY OF THE COLLEGE

MIDDLEBURY College was chartered in 1800, and its first class was graduated in 1802, at which time the first academic degrees conferred in Vermont were bestowed. Even before the granting of a charter, collegiate work had been prosecuted in Middlebury, under the leadership of Rev. Jeremiah Atwater, Yale, 1793, the Principal of the Addison County Grammar School, who became the President of the College, having been recommended for the position by Doctor Dwight, then President of Yale College. A library of 494 volumes had already been carefully selected and presented to the College. For ten years all the work of the institution was conducted in a large frame building which it shared with the Addison County Grammar School, but in 1810 Colonel Seth Storrs of Middlebury gave to the Corporation thirty acres of land, "beautifully situated in an elevated part of the village," which now forms part of the College Campus. On this site the first building of the College was erected in 1814. It was called at first "West College," but in 1846 was named Painter Hall, in honor of Hon. Gamaliel Painter, one of the most generous patrons of the College and most useful citizens of the town, who had bequeathed all his property to the institution. It has been in continuous use since its erection, and is the oldest college building in Vermont. The commodious and beautiful Chapel was erected in 1836, and is still the most commanding object on the Campus and in the landscape of the village, and a useful and convenient administration and recitation building. Starr Hall, a large dor-

mitory, was erected by the beneficence of Charles and Egbert Starr in 1861, and rebuilt in 1865, after a disastrous fire, by the same donors. These three graceful stone buildings, forming a college row typical of New England, give dignity and quiet beauty to one of the most beautiful college parks to be found in America.

The builders of Middlebury were men of deep religious faith and earnest moral purpose, and clergymen from the surrounding towns long exercised controlling influence in the Corporation. The College has had a long and heroic struggle with poverty, but her doors have never been closed and she has furnished uninterruptedly to the youth of northern New England opportunities for thorough literary education and a vantage point of outlook upon the larger life of the world.

MIDDLEBURY'S RECORD

During her first century Middlebury sent out 1,686 graduates; 543 of these were clergymen, including 71 missionaries. An exceptionally large proportion became teachers, of whom 106 were professors in colleges or theological seminaries; 32 college presidents were sent forth by Middlebury from 1800 to 1900. She graduated in that time 400 lawyers, including over 50 judges of courts. Fifteen of her alumni have been members of Congress, and nine, governors of States or Territories. It is Middlebury's boast that, in proportion to her size and the means at her command, no American college has made a nobler record.

A residential town of 2,000 people, on the Rutland Railroad, New York Central Lines, with through trains between New York and Boston and Montreal, Middlebury is an ideal location for a rural New Eng-

land college. The foot-hills of the Green Mountains are a few miles distant. From the heights of the College Campus one sees many of the grander peaks of the Adirondacks. The Otter River flows through the town, and in its valley are many of the best farms of Vermont. Elms and maples line the village streets, and the houses betoken modest thrift and quiet taste. Water of unexcelled purity and quantity is brought from mountain springs, eight miles distant. Intoxicating liquors are not sold, and there are no trolley lines to neighboring cities. The College is the pride of the village, and many of the homes of the people are open to the students.

THE VILLAGE OF MIDDLEBURY

The specialty of Middlebury is not a department of study, but a type of student. The location of the College in a frugal agricultural region favors economy. For over a century she has sought out particularly the youth from the quiet homes of northern New England and surrounded them with encouragement to modest living while engaged in the pursuit of knowledge. By resolute endeavor college expenses have been kept low. Students who have to work their own way are especially encouraged, in the belief that such students furnish the most healthful tone to an institution of learning. Those who can afford more than Middlebury exacts are invited to consider the advantages to character which come from such an atmosphere in the formative period of life.

MIDDLEBURY'S SPECIALTY

The Middlebury idea is that, since no two men are alike, each student needs the particular care and over-

sight of his instructors during his entire college course. With a small student body and an ample number of professors such oversight is possible, and the unusual success of Middlebury's graduates is believed to be due to its maintenance.

INDIVIDUAL TRAINING

In the past four years the number of instructors has been doubled and important courses have been added in every department of instruction. In the departments fundamental to engineering, additional facilities have been provided, both in the introduction of new courses and in the lengthening of old ones, and by the purchase of additional apparatus. A number of courses of graduate grade are included in each department, and provision has been made for a fifth college year, either immediately upon graduation or subsequently, leading to the degree of Master of Arts or Master of Science. Special attention is invited to the courses in Forestry, and also in Economic Geology, the latter with special reference to Vermont's large quarrying interests.

RECENT PROGRESS

A Scientific Course has been initiated, and a Department of Pedagogy has been established by the State of Vermont, maintained by an annual appropriation. The Legislature of 1910 increased the annual appropriation to Middlebury College by $7,600, making the total annual appropriation for instruction purposes $13,600. A part of this increase is devoted to "instruction in scientific branches related to the industries of Vermont." In six years the number of students has doubled. Two new professorships have been founded, and the resources of the College have been

much increased. In addition to Pearsons Hall, $50,000 has been secured for the erection of a gymnasium. The College has received the indorsement of the General Education Board, which has made a conditional grant of $50,000 toward a fund of $200,000, which has already been pledged. Attention is called to the new departments of Engineering, Physical Education, Pomology, and Home Economics. Indications point to further substantial growth and increase of the facilities offered to students.

GRADUATE WORK

In the announcements of the Departments of Instruction will be found many courses which are suitable for graduate work. Particularly in connection with the Department of Pedagogy, a fifth year of college study may be recommended in preparation for teaching. Graduate students are welcome in all courses in which work is sufficiently advanced to count for a Master's degree, and whenever possible special direction will be afforded them.

The degrees of Master of Arts and Master of Science are offered for graduate work performed in the regular college year, at summer sessions, or *in absentia*, in accordance with the following regulations:

1. The candidate must have a baccalaureate degree from this College, or from one having an equivalent curriculum.

2. Non-resident students may register at any time during the year; resident students must register during the first week of either semester, or during the first week of the Summer Session. A renewal of all existing registrations must be made at the beginning of each college year.

3. At the time of registration, the candidate, after conference with the instructor or instructors interested, shall outline the work intended and the studies desired, and present such outline to the Committee on Graduate Instruction for its approval. The courses selected should be well coördinated. They may be from one or several departments of the College and include such additional work as may be outlined by the instructors under whom work is desired.

4. To obtain the degree either of Master of Arts or of Master of Science, thirty credits, representing one year's resident work (September to June), will be necessary. Credits acquired in the graduate courses of the summer or Saturday sessions may be counted. The degrees may also be obtained *in absentia* with the limitation that in case of complete non-residence they will not be conferred before the third Commencement after registration.

5. Graduates of Middlebury College who have to their credit work done in undergraduate years, and not counted for a baccalaureate degree, may count such credits toward an advanced degree, provided, however, that the work is approved by the Committee on Graduate Instruction, and has been completed with a grade of at least 80 per cent.

6. No credits counted in conferring a first degree at Middlebury College, or elsewhere, shall be accepted for a second degree.

7. Work done *in absentia* must be completed within five years, unless this period is extended by vote of the Faculty.

8. All candidates must present themselves for a final examination and receive the degree in person.

9. Resident candidates will be charged regular tuition fees; non-resident candidates will be charged a registration fee of $10 annually. There is no additional fee either for examinations or for diploma.

EXAMINATIONS

EXAMINATIONS in each subject are held at the close of each semester. If a student, for any cause whatever, has been absent from 10 per cent, or more, of the recitations of the semester, he will be required to take a preliminary examination before the time of the regular examination.

A student whose term mark in any course falls below 50 per cent shall be excluded from the examination and shall repeat the course with the following class, except that if the course be an elective one he may substitute another elective.

A student shall be conditioned whose combined recitation and examination mark at the close of a semester or of a study is below 60 per cent, unless the examination mark be as high as 70 per cent; but no student shall be allowed to pass whose examination mark is below 50 per cent.

A student who fails to pass an examination at the close of the first semester, and is thereby conditioned, will be given an opportunity to take another examination either on the first day after the Easter recess, or on such one of the first three days of the college year as shall be determined by the Registrar. A student who is conditioned at the close of the second semester may take an examination either on such one of the first three days of the college year as shall be determined by the Registrar, or on the first day after the Christmas recess. But one examination will be allowed, and no other opportunities for the removal of conditions will be given, except that a Senior may take examinations for deficiencies or conditions on the Sat-

urday preceding Commencement, and students attending the Summer Session, at the close of the session.

Any student failing to make up any condition as provided for above will be required to repeat the subject with the following class, even though, from conflict of hours, or any other cause, it necessitates for him the temporary omission of some of the regular work of his class.

Any student who is obliged by the operation of the foregoing rule to repeat with the following class subjects amounting to one-half, or more, of the regular hours of the semester will be ranked as a member of that class.

A conditioned student who, because of the omission of the subject from the curriculum for the year, is prevented from repeating a study in which he is due shall, at the beginning of the second semester after his failure, elect another study in its place.

A student who fails to attain a passing grade in three or more subjects in any one semester shall be summoned before the Administration Committee to show cause why he should not be dropped from College.

No student will be allowed to take more than five courses in any semester, if his grade for the preceding semester has been lower than 80 per cent in more than one course, except that Freshmen may take an additional study to cancel entrance conditions.

A student who is absent from any examination at the close of a semester will be required to pass that examination on or before the beginning of the corresponding semester of the following year. If a student fails to meet this requirement, he must repeat the course with the following class.

No student will be given Sophomore rank until he has made up his entrance conditions.

No student who is conditioned in more than one study will be excused from college exercises for the purpose of playing on an athletic team.

RECORD OF SCHOLARSHIP

At the close of a study, any student who desires it may receive from the Registrar a general statement of his rank in that study, based upon his term work and examination. If he has attained 90 per cent or above, his rank is reported as A, or excellent; if between 80 and 90 per cent, as B, or good; if between 70 and 80 per cent, as C, or fair; if between 60 and 70 per cent, as D; if below 60 per cent, the student is conditioned in that study. These reports are also given to parents by the Registrar upon request.

HONORARY APPOINTMENTS

The Faculty, under the direction of the Corporation, give to the first third of each department of each class, on the basis of scholarship, honorary appointments for Commencement. The valedictory and salutatory appointments are of equal rank, the former being given to the leader among the men and the latter to the leader among the women. Those receiving honorary appointments for Commencement are eligible for election to the Phi Beta Kappa Society, provided that they have attained an average rank, for the entire course, of 85 per cent.

SPECIAL HONORS

To promote and encourage special investigation in the various departments of the curriculum, the Faculty have established a system of honors. These are divided into two classes, Honors and Highest Honors, and are awarded on the following conditions:

1. The attainment of 80 per cent for Honors, and 90 per cent for Highest Honors, as an average rank in studies of the department in which the honors are sought.

2. The performance of at least 200 hours of satisfactory additional work assigned by the professor, which must be of a superior quality for the attainment of Highest Honors.

3. The preliminary payment of $5 a semester when laboratory work is involved.

These honors will be printed on the Commencement program and in the next annual Catalogue, and will be certified to, when requested, by a written certificate from the President and the professor of the department, stating the nature and quality of the extra work done.

The degrees of A.B. and B.S. are conferred *cum laude* upon those who have attained an average rank, for the entire course, of 85 to 90 per cent; *magna cum laude* if that rank is 90 to 95 per cent; *summa cum laude* if it is 95 per cent or above.

PRIZES

The Deacon Boardman Peace Prize. Established in memory of Samuel Ward Boardman, 1789–1870. An annual prize of $30 to the member of the Junior class submitting the best essay in favor of peace, and

in opposition to war as a method for settling international differences. The essay must be creditable as a literary composition and consist of at least 2000 words.

The English Prizes. First and second prizes of $40 and $20 respectively to the women of the Class of 1913, at the end of the Junior year, for excellence in the first three years' work in the Department of English.

The Prizes in History and Political Science. First and second prizes of $40 and $20 respectively to the men of the Class of 1913, at the end of the Junior year, for excellence in the first three years' work in the Departments of History and Political Science.

The Pedagogy Prizes. Two prizes of $30 and $20 for the students of the Department of Pedagogy submitting the best essays on educational topics.

The Merrill Prizes. Four awards, $25, $20, $15, and $10, to the four men of the Sophomore class adjudged the best speakers at a contest on Monday evening of Commencement week.

The Parker Prizes. Two prizes of $20 and $10 to two of five competitors in the Freshman class who are adjudged the best speakers at the same contest.

In the Latin Department, recognition is made of excellence in the work of the second semester of the Sophomore year, including the preparation of a notebook exhibiting the debt of English poetry to Horace, by the presentation to the two successful competitors of reproductions of works of classic art, selected by the head of the department.

THE EGBERT STARR LIBRARY

THE Library of Middlebury College is older than the institution itself. Before the granting of the charter the benevolent and progressive citizens of the town had collected some 500 well-chosen volumes for the use of students. Volumes bearing the autographs of some of the founders are still on the library shelves. In the early history of the College two flourishing student organizations, the Philomathesian and Philadelphian Societies, founded libraries which were unusually extensive and valuable for the time, and many of their volumes are still among the treasures of the College. Great improvement in the Library was made during the administration of President Cyrus Hamlin (1880–85), who removed the books from the Chapel to the north division of Painter Hall, and opened all the shelves to the students.

The beautiful and convenient marble Library now occupied was erected with funds bequeathed by Mr. Egbert Starr, and dedicated during the centennial exercises of the College in July, 1900. The cost of the building was $50,000, to which was added $5,000 for its decoration and $5,000 for the purchase of books by the son of the donor, Dr. M. Allen Starr. The front of the building is entirely devoted to a large and convenient reference library, and the capacity of the stacks is 90,000 volumes. The entire Library now contains about 30,000 volumes, and is a depository of government publications. The number of volumes added the past year was 1,445. Students are granted free access to all the shelves. The building is open continuously through the working hours of the day.

The reference rooms contain a large number of reviews and magazines, and a reading room with daily and weekly papers is maintained in the south division of Painter Hall. A reference library on education is provided in the rooms of the Department of Pedagogy.

The Library staff has recently been increased. The appropriation for Library purposes is now $3,500 a year, and several gifts of money for additions to the Library have been received, as well as a number of volumes by donation. A few students from the upper classes are given employment in the Library in part payment of their tuition.

THE WARNER SCIENCE HALL

THE studies in the Departments of Physics, Biology, Geology, Chemistry, and Home Economics are pursued in the large and convenient Warner Science Hall, erected in 1901 through benefactions of the late Ezra J. Warner of the Class of 1861. The building is a memorial of his father, Hon. Joseph Warner, formerly a resident of Middlebury, and a trustee of the College from 1850 to 1865. By the will of Mr. Warner the College will receive a bequest of $25,000 for the care and maintenance of the Hall, and for the purchase of supplies for the departments which it accommodates.

The Department of Physics is located on the first floor, and comprises a main laboratory for student use with sufficient apparatus for two full years of study and investigation in Physical Science, a private laboratory for the instructor, and a physical lecture room.

The Departments of Biology and Geology occupy the second floor. Here are laboratories for the study of Geology, Comparative Botany, and Zoölogy, and the museums of geological and zoölogical specimens.

The third floor is devoted entirely to Chemistry. Convenient laboratories for qualitative and quantitative analysis, a private laboratory for the instructor, a dark room for photography, and a chemical lecture room are included in the equipment.

The past year a pleasant and convenient laboratory of Home Economics has been fitted up and equipped.

Advanced study and independent research are encouraged in each of the natural and physical sciences, and in the modern and well-furnished laboratories of this building abundant opportunities are afforded to the student.

THE MUSEUM OF NATURAL HISTORY

Among the professors of the College for many years have been men of marked ability in natural science, who have shared with the institution the fruits of their researches. One of the earliest geological surveys of Vermont was conducted by Professor Charles B. Adams, who then occupied the chair of Natural History. He laid the foundation for the large collection of fossils representing the different geological formations. The work of Professor Henry M. Seely, long connected with the College, is in evidence in the large collection of fossils of the Champlain Valley.

In Botany, the complete series of the flowering plants and ferns of the Champlain region, which was collected by President Brainerd, is especially notable.

This herbarium is constantly increasing, and valuable additions have been made in recent years in the higher fungi and other cryptogamous plants gathered by Dr. Edward A. Burt.

THE McCULLOUGH GYMNASIUM

In 1910 Hon. John G. McCullough of Bennington offered to give $25,000 towards the erection of a gymnasium, and the alumni of the College completed a gymnasium fund of $50,000 at Commencement of that year. Contracts have been let calling for the completion of the building in February, 1912. The material is light marble, and the style colonial, like the other buildings of the College. The dimensions are 110 by 57 feet. The main floor contains a large exercising room and basket-ball court, with a room for smaller gymnastic classes, which also serves as a stage for dramatic representations. The first floor contains a locker room, with space for 375 lockers, abundant shower baths, director's office and examination room, faculty locker room, two hand-ball courts, boxing and fencing room, and quarters for visiting athletic teams. A convenient serving room renders the building available for college banquets.

Courses in physical education are offered to all students and are required of Freshmen and Sophomores. This work is under the direction of Mr. Ray L. Fisher, who is also in charge of all college athletics.

The college has tennis courts for both men and women, and an athletic field for baseball and football.

COLLEGE OFFICES

The office of the President is located on the third floor of the Chapel. The President may be seen from 11 to 12 A.M. each day except Sunday, and consultation by students on any subject of importance to them is cordially invited. When the President is out of town, the Senior Professor is in charge of the College, and may be consulted with equal freedom. A catalogue of all graduates, former students, and friends of the College is kept in the office, and prompt notification of change of address is requested. The President's home is the large dwelling built for the purpose by President Kitchell and purchased for the College with funds contributed by Hon. Joseph Battell of the Class of 1823.

Dean Howard's office is in Painter Hall, middle division. Men desiring to be out of town while College is in session should first secure permission of him. Excuses for absence should also be presented to the Dean.

The Dean of Women has her office on the fourth floor of the Chapel, where women may offer reasons for absence.

The office of the Registrar is in Painter Hall, middle division. All students are expected to register at the beginning of each semester. The Registrar's office will be open for this purpose on and after the Monday before the beginning of the college year.

The Treasurer of the College has his office in the National Bank of Middlebury, and may be seen during banking hours.

RELIGIOUS SERVICES

THE exercises of each day, except Sunday, begin with religious services, which all students must attend. They are also required to attend public worship on Sunday morning, at such churches as are decided upon by the students or their parents.

In the Hemicycle of Warner Science Hall, the Young Men's Christian Association holds meetings on Tuesday evenings, and the Young Women's Christian Association on Wednesday afternoons, to which the students are welcome.

The College is non-sectarian, but seeks to promote a healthful religious influence.

HALLS OF RESIDENCE FOR MEN

PAINTER HALL was erected in 1814, and is one of the best examples of colonial architecture in New England. It was first known as West College, but since 1846 has borne the name of Gamaliel Painter, one of the founders of the College, whose generosity provided the funds for the building.

Starr Hall was built in 1861, and was rebuilt, after a disastrous fire, in 1865. The funds for its erection were contributed by Charles and Egbert Starr. It has thirty-two suites, designed for two students each, consisting of study, bedroom large enough for two single beds, and closets.

Both halls are of gray limestone, and are substantial and comfortable buildings. A few years ago they were remodeled and furnished with bathrooms, water-closets, steam heat, and electric light. The charges

for rooms in both dormitories are the same, and are exceedingly moderate: $30 a year per student when two occupy a room, and $60 when a room is occupied singly, including light and heat in each case. The rooms in both halls are furnished with single iron beds; other furniture must be provided by the student, and may be purchased in Middlebury. Students should bring bedding.

In assigning rooms, preference is given to students in College in order of classes. A drawing for rooms for 1912–13 will be held June 8, 1912. Students now occupying rooms, and desiring to retain the same, may do so by depositing $5 advance payment on room-rent with the Treasurer before June 8. Others desiring rooms for next year, including incoming students, may secure reservations by making the $5 advance deposit. Rooms not taken June 8 will be assigned to students applying later in order of application, irrespective of classes.

The halls will be ready for occupation by the students on the noon of the Monday that precedes the opening of College after any vacation period; they will be closed for all vacation periods on the noon of the first Saturday after the period begins.

HALLS OF RESIDENCE FOR WOMEN

Pearsons Hall, a new building for women, was opened at the beginning of the college year in 1911. It is located on a commanding height overlooking the village, from which wide views of the Adirondacks and Green Mountains are obtained. The hall is of marble, of pleasing colonial design, and contains a

large social hall, a gymnasium, and dressing and bathing rooms, besides both single and double living rooms.

Battell Cottage was enlarged in 1910, the addition furnishing the dining hall and kitchen for both the Cottage and Pearsons Hall. The two buildings together accommodate about one hundred women.

The price of board and room in either building is $200 a year, payable semi-annually in advance to the Treasurer of the College. Applications for rooms may be made to Miss Crawford, Dean of Women.

HAMLIN COMMONS

TABLE BOARD is furnished to men at Hamlin Commons, a club conducted on the coöperative plan by the students under the supervision of the President and the Treasurer of the College. The College owns the building, which is located just outside the Campus, and gives the use of it to the students without cost. The food is plain but abundant, and the cost is $3 a week. Payment is required each week, strictly in advance.

EXPENSES

THE location of the College in a small village in a frugal agricultural region favors economy, and by a resolute endeavor the expenses of students have been kept extremely moderate. The charges of the College are small, and the general expenses of students should not be large. The following table indicates the principal items:

Tuition	$80.00
Incidentals: library, reading room, gymnasium, etc.	12.00
Room rent in Starr or Painter Hall, including heat and light	30.00
Table board for 37 weeks, at $3 a week	111.00

In most of the elective courses in Chemistry, Biology, and Physics a laboratory fee of $5 for each semester is charged, as specified in the announcements of the several courses.

The charges for room rent, heat, and light in Starr and Painter Halls are on the supposition that two students occupy a room. When a student rooms alone, the charge for rent, including heat and light, is $60 per year.

Board and room for women in Pearsons Hall and Battell Cottage are $200 a year, payable semi-annually in advance.

Bills for tuition and other charges are rendered in October and February of each college year, and are then payable. If not settled before January or June following, $5 is added to the account. A student who does not make payment at the opening of the following year stands suspended until the account is settled.

The charge for tuition is the same for men and women. Expenses for clothing, traveling, entertainments, etc., are not included.

SELF-HELP

For many years Middlebury has been known as a college at which exceptional opportunities are afforded to students who must depend largely upon their own

resources in securing an education. The principal assistance a college can render in this respect is in keeping expenses down, especially the charges for room and board. Employment by which the student can earn a part of his expenses can usually be obtained about the College or in the village, although regular work cannot be promised before the student has arrived and his capacity and fitness are determined. Occupations in which students find employment are waiting on table, care of furnaces, farm and garden work, typewriting, tutoring, etc. The Deans keep a list of students desiring work, and applications should be made to them.

SCHOLARSHIPS

The College has a generous number of student benefits, many of them given in early years at great self-sacrifice on the part of the donors. The income of these funds is expended exclusively in payment of the tuition, in whole or in part, of needy and deserving students of good deportment and application. When the number of students was much smaller, these funds allowed a somewhat more liberal bestowment of beneficiary aid than is now possible. It is not expected that those whose circumstances admit the full payment of college bills will apply for scholarship assistance. It is earnestly desired, however, that where need requires, those who might not otherwise be able to receive a college education will apply for aid from this source. The College has a long record of special encouragement to those who are obliged to secure an education largely through their own efforts. Correspondence con-

cerning scholarships should be directed to the President, who will furnish blanks for application.

Any scholarship may be forfeited at any time during the course through negligence or misconduct. When a student incurs more than one condition in any semester, or when he receives a second warning because of unexcused delinquencies, the scholarship allowance for that semester is thereby forfeited.

Among the student benefits dispensed by the College are the following:

The Waldo Fund, established by Mrs. Catherine Waldo of Boston.

The Baldwin Fund, received from the estate of John C. Baldwin, Esq., of Orange, N. J. The Waldo and Baldwin Funds are used in canceling college bills to the amount of $80 of each of twelve students whose scholarship, deportment, and necessities warrant such a benefaction.

The Warren Fund, applied in payment of college bills of those who are preparing for the Gospel Ministry.

The Fairbanks Scholarships, established by Thaddeus Fairbanks, Esq., of St. Johnsbury.

The Levi Parsons Scholarships, established by Hon. Levi Parsons Morton of New York City.

The Daniel O. Morton Scholarship, established by Hon. Levi Parsons Morton of New York City.

The Penfield Scholarship, established by Allen Penfield, Esq., of Burlington.

The Emma Willard Scholarship, established

by the Emma Willard Association, for the benefit of deserving young women.

The Charles A. Field Scholarship, given to the village of Proctor, Vermont, "as a memorial of regard for Fletcher Dutton Proctor and of gratitude to him, and for courtesies received at the hands of other residents of said village."

The A. P. Stafford Fund, "to assist needy students from Wallingford to an education."

The Windham County Congregational Conference Scholarship.

STATE SCHOLARSHIPS

An annual appropriation from the State of Vermont pays to the amount of $80 annually "the tuition and incidental college charges of thirty students, one of whom shall be designated and appointed by each Senator in the General Assembly, such appointment to be made by such Senator from his respective county, provided any suitable candidate shall apply therefor, otherwise from any county in the State."

Any person prepared to enter College, desiring to take advantage of a State scholarship, should apply to one of the Senators of the county in which he resides, and the Senator may thereupon give him a certificate of appointment, which will cancel his tuition for two years. Should the Senators in the applicant's county already have made appointments, the student should immediately apply to the President of the College, as there may be a vacancy from some other county of which the applicant may avail himself.

Under this act, students of both sexes are eligible for appointment to a State scholarship. The same regulations as to forfeiture through misconduct and incurring conditions apply to State scholarships as to student benefits owned by the College.

ASSOCIATED ALUMNI

THE officers and committees of the Associated Alumni of the College for the year 1911–12 are: *President*, C. Ford Langworthy, '87, of Washington, D.C.; *First Vice-President*, Walter S. Grant, '95, of Brooklyn, N.Y.; *Second Vice-President*, Elmer G. Bridgham, '97, of Sitka, Alaska; *Third Vice-President*, Ellsworth C. Lawrence, '01, of Malone, N.Y.; *Secretary and Treasurer*, Frank W. Cady, '99, of Middlebury. *Central Committee:* Professor Charles B. Wright; Professor Duane L. Robinson, '03; Sarah Blossom Palmer Bryant, '91. *Necrological Committee:* Thomas E. Boyce, '76, of Middlebury; Stanton S. Eddy, '94, of Middlebury; Guy B. Horton, '00, of Burlington.

ALUMNI ASSOCIATIONS

ALUMNI Associations in New York, Boston, and Chicago hold annual meetings. The officers of the New York Association for the year 1911–12 are: *President*, William W. Gay, '76; *Secretary*, Sanford H. Lane, '05, 72 Broad St., New York. *Executive Committee:* Edgar R. Brown, '93; Theodore D. Wells, '98; Percival Wilds, '02.

The officers of the Boston Association for the year 1911–12 are: *President*, Guy C. Lamson, '96; *Secre-*

tary and Treasurer, Miss Rena I. Bisbee, '00, 182 Palfrey Street, Watertown, Mass.

The officers of the Chicago Association for the year 1911–12 are: *President*, George E. Plumbe, '61; *Secretary*, H. Parker Williamson, '96, Box 216, Faculty Exchange, University of Chicago.

DEGREES CONFERRED IN 1911

HONORARY DEGREES

Doctor of Divinity

Richard Bartlett Esten

Doctor of Laws

Franklin William Hooper
John Abner Mead, '64
William Henry Porter
Harrington Putnam

Doctor of Science

Samuel Sheldon, '83

Master of Arts

Charles Jay Taylor

DEGREES IN COURSE

WITH COMMENCEMENT APPOINTMENTS

Master of Arts

W. Guy Colby
Earl Montgomery Gove, '07

Master of Science

Ray Adams Stevens, '09

Bachelor of Arts

Franklin George Butterfield, Class of 1863

John Milton Avery
Wayne Cook Bosworth †§[9]
Herbert Alfred Burnham*
Albert Forsyth Burt ‡§
Walter Henry Cleary †§
Frederick Ames Coates
Alvin William Coolidge
Russell Pease Dale [1]

* Commencement Honors.
† Commencement Honors, *cum laude*.
‡ Commencement Honors, *magna cum laude*.
§ Phi Beta Kappa.
1. Honors in Chemistry.
9. Highest Honors in Latin.

Pierce Wordsworth Darrow
William Hinds Darrow[1]
Stephen Allen Doody †§[4]
Woodburn Prescott Harris
George Reed Hemenway
Rollo Alvord Kilburn
Edwin Thomas Maloney*
Alfred Martin
John William McConnell
Hiram Dunlap Moore
Edward Martin Noyes*[2]
Ralph Frederick Palmer
J. Gordon Peach*
Amerigo Joseph Ratti*[3]
William Richmond
Frank Canedy Ryder
Edwin Sherwood Stowell Sunderland[8]
Harold Stuart Tuck
Robert Royal Twitchell

Elizabeth Tupper Adams
Grace Lillian Allen[7]
Gertrude Brodie
Veva Elsie Bullard
Ruth Ida Burnham †§
Alice Eleanor Casey
Elizabeth Caswell
Isabelle Caroline Darrow
Emma Gibbs Easton ‡§
Louise Genevieve Fellows †§[6]
Kathleen Maria Foote
Margaret French ‡§[9]
Marion Adelaide Frizelle †§
Eliza Hester Hart
Alice Hemenway
Myrle Blanche Hill †§
Louise Johnson[1]
Mabel Martin ‡§[2]
Marion Martin
Jennie Blanche McLellan †§
Marion Edith Roys*
Elizabeth Ryder[5]
Margaret Farnsworth Sheldon
Eunice Woodward Smith
Carmen Renda Walker
Cora Elizabeth Welch[2]
Sara Dickinson Whitney

* Commencement Honors.
† Commencement Honors, *cum laude*.
‡ Commencement Honors, *magna cum laude*.
§ Phi Beta Kappa.

1. Honors in Chemistry.
2. Highest Honors in Chemistry.
3. Honors in French.
4. Highest Honors in French.
5. Honors in German.
6. Highest Honors in German.
7. Honors in History.
8. Highest Honors in Jurisprudence.
9. Highest Honors in Latin.

PRIZE SPEAKING AWARDS

MERRILL PRIZES

Class of 1913

First Prize. William Francis Pollard, Jr.
Second Prize. Wilfred Edward Davison
Third Prize. John Alanson Arnold
Fourth Prize. Ralph Hall Waldo

PARKER PRIZES

Class of 1914

First Prize. Earland B. Cook
Second Prize. John Fiske Hough

PRIZES TO JUNIORS

HISTORY AND POLITICAL SCIENCE

First Prize. Edward Joseph Ryan
Second Prize. Arthur Charles Thomas

ENGLISH

First Prize. Thelma Gertrude Havens
Second Prize. Margaret Helen Croft

PRIZES IN PEDAGOGY

First Prize. Edwin Lawrence Bigelow, '13
Second Prize. Marion Adelaide Frizelle, '11

STUDENTS

GRADUATE STUDENTS

Edith S. Atwood, '10	*Windsor*
Maude E. Avery, '10	*Preston Hollow, N. Y.*
Warren E. Bristol, '07	*New York, N. Y.*
William H. Carter, '10	*Chelsea*
M. Louise Chaffee, '08	*Jamesburg, N. J.*
David H. Corkran	*Middlebury*
Harry A. Farrar, '10	*New Haven*
Noah S. Foss	*Washington, Ct.*
Clara H. Gilbert	*Pittsford*
John W. McCormack, '09	*Indian Lake, N. Y.*
James L. Richmond, '08	*Orange, N. J.*
Cora E. Talbot	*Brandon*
Chester M. Walch, '07	*Proctor*

MEN

SENIORS: CLASS OF 1912

Philip Sheridan Andrus	Cl.	*Enosburg Falls*	119 S. Main St.
Charles Wright Bundy	Cl.	*Nashua, N. H.*	D. K. E. House
William Christie Duncan	Cl.	*Middlebury*	Battell Block
Marcus Franklin Gorham	Cl.	*West Rutland*	5 South St.
Carl Diedreich Grupe	Cl.	*Willsboro, N. Y.*	15 Painter Hall
Ivers Alfred Hackett	Cl.	*Bethel*	1 Starr Hall
Arthur Webster Harris	Cl.	*Sheffield*	14 Starr Hall
Ralph Warner Hedges	Cl.	*Northfield*	D. U. House
Philip Evans Kidder	Cl.	*Essex Junction*	D. K. E. House
Arthur Burt King	Cl.	*West Hampton, N. Y.*	D. U. House
John Kopke	Cl.	*Brooklyn, N. Y.*	D. K. E. House
Michael Joseph Lahiff	Cl.	*Adams, Mass.*	Chi Psi Lodge
Willys Merritt Monroe	Cl.	*Cos Cob, Ct.*	25 Starr Hall
Lewis Chester Morrison	Cl.	*Boston, Mass.*	106 S. Main St.
Charles William Mulcahy	Cl.	*Hardwick, Vt.*	Chi Psi Lodge
Richard Sargent O'Connell	Cl.	*Middlebury*	Sargent House
Edward Joseph Ryan	Cl.	*Lee, Mass.*	10 Starr Hall
Brooks Frederick Smith	Sc.	*Ludlow*	17 Painter Hall
Joseph Milton Stillson	Sc.	*New Preston, Ct.*	20 Weybridge St.
George Goldthwaite Taylor	Cl.	*Granby, Mass.*	Chi Psi Lodge
Hugh Olin Thayer	Sc.	*West Brattleboro*	D. U. House
Arthur Charles Thomas	Cl.	*Diamond Point, N. Y.*	D. U. House
Earle Thurman Tracey	Cl.	*Nashua, N. H.*	Chi Psi Lodge

Wayland Flint Walch	Cl.	*Bedford, N. H.*	14 Painter Hall
John Smith Woodward	Sc.	*Warrensburg, N. Y.*	20 Weybridge St.

JUNIORS : CLASS OF 1913

John Comstock Agnew	Sc.	*Port Henry, N. Y.*	D. K. E. House
John Alanson Arnold	Cl.	*Middlebury*	9 Weybridge St.
Dale Simpson Atwood	Sc.	*St. Johnsbury*	13 College St.
Edwin Lawrence Bigelow	Ped.	*Ledges Stowe*	13 Starr Hall
George Lester Brayton	Sc.	*Hartford, N. Y.*	Chi Psi Lodge
Lacy Wheaton Bump	Sc.	*Potsdam, N. Y.*	D. K. E. House
Edgar Alonzo Carrier, Jr.	Cl.	*Colchester, Ct.*	9 Starr Hall
William Wallace Chalmers	Sc.	*Fitchburg, Mass.*	D. K. E. House
Theron Lee Culver	Sc.	*Royalton*	13 Painter Hall
Marvin James Dodd	Sc.	*East Orange, N. J.*	D. K. E. House
Rolland John Ellsbury	Sc.	*Willsboro, N. Y.*	8 Starr Hall
William Eben Greenleaf	Ped.	*West Haven*	6 Painter Hall
Bernard Arthur Leonard	Sc.	*Wallingford*	7 Starr Hall
Walter Bernard McGuirk	Sc.	*East Wallingford*	9 Starr Hall
William Kennedy MacMurtry	Cl.	*Middlebury*	6 Starr Hall
James Sterling Moran	Sc.	*Middlebury*	48 Court St.
William Francis Pollard, Jr.	Cl.	*Riverside, Mass.*	D. U. House
Hobart Bennett Potter, Jr.	Cl.	*Newark, N. J.*	D. U. House
Clinton Seymour Reynolds	Cl.	*Pittsfield, Mass.*	18 Painter Hall
Marshall Jewett Root	Sc.	*Providence, R. I.*	7 Starr Hall
Charles Leo Smiddy	Sc.	*New London, Ct.*	D. U. House
Hendrick Woodruff VanNess	Sc.	*Greenwich, N. Y.*	16 Painter Hall
Roy Harold Walch	Cl.	*Hudson, N. H.*	9 Painter Hall
Edward Chauncey Walker	Sc.	*Richmond*	14 Starr Hall
Edgar Jolls Wiley	Sc.	*Ticonderoga, N. Y.*	6 Starr Hall
Franklin Grandey Williams	Cl.	*Bridport*	7 Painter Hall
Harry Oliver Williams	Cl.	*Rutland*	Chi Psi Lodge

SOPHOMORES : CLASS OF 1914

Harold Wallace Abbott	Sc.	*Derry, N. H.*	11 Starr Hall
Leslie Bernstein	Cl.	*Richmondville, N. Y.*	16 Starr Hall
Robert Edgar Bundy	Cl.	*Bethel*	D. K. E. House
Willard Duncan Carpenter	Sc.	*Vergennes*	27 Starr Hall
Howe Kendrick Cassavant	Cl.	*Albany, N. Y.*	Chi Psi Lodge
Laurance Webster Cluff	Ped.	*Hyde Park, Mass.*	23 Starr Hall
Earland Bickford Cook	Sc.	*Concord, N. H.*	D. K. E. House
Elton Frick Cronk	Sc.	*Greenwich, Ct.*	D. U. House
Homer Ridgway Denison	Cl.	*New Haven, Ct.*	23 Starr Hall
Richard Stewart Esten	Ped.	*Middlebury*	55 Seminary St.

Howard Clinton Farwell	Sc.	*Providence, R. I.*	11 Starr Hall
Benjamin Warner Fisher	Sc.	*Vergennes*	D. U. House
Raymond Garfield Fuller	Cl.	*Johnson*	6 Franklin St.
Harvey Edward Goodell	Sc.	*Readsboro*	D. U. House
Herbert Warren Goodhue	Sc.	*Hyde Park, Mass.*	D. U. House
Robert Henry Hill	Cl.	*Ticonderoga, N. Y.*	8 Starr Hall
Arthur Russell Holden	Sc.	*Shirley, Mass.*	12 Starr Hall
John Fiske Hough	Cl.	*Rutland*	35 Starr Hall
Moses Gilbert Hubbard	Cl.	*Summit, N. J.*	32 Starr Hall
Charles Thomas Hughes	Sc.	*Somerville, Mass.*	22 Starr Hall
Ralph Mayo Hutchins	Sc.	*Coös, N. H.*	21 Starr Hall
Howard Conkling Johnston	Sc.	*Horicon, N. Y.*	22 Starr Hall
Clarence Wilson McIntire	Ped.	*Woodsville, N. H.*	1 Starr Hall
Walter Irving Metcalf	Cl.	*Hydeville*	15 Starr Hall
Augustus W. F. Newman	Sc.	*Hoosac Tunnel, Mass.*	7 Painter Hall
Joshua Zau Tsung Nyi	Ped.	*Hangchow, China*	3 Weybridge St.
Thomas Hamilton Ormsbee	Sc.	*Brooklyn, N. Y.*	Chi Psi Lodge
Oscar Bingby Rogers	Sc.	*Remsenburg, N. Y.*	D. U. House
George Herbert Seavey	Ped.	*Hudson, N. H.*	12 Starr Hall
Karl Isaac Solomon Sterns	Cl.	*Middlebury*	Chi Psi Lodge
Nobuzo Suyemitsu	Sc.	*Uwamachi, Ehimekan, Japan*	15 College St.
Edward Robert Triggs	Sc.	*East Port Chester, Ct.*	5 Starr Hall
Homer Jackson Vail	Sc.	*Randolph*	20 Weybridge St.
John Charles Eliot Voss	Cl.	*Shoreham*	125 Main St.
Dominic Henry Weafer	Sc.	*Morrisville*	D. K. E. House
Elmer Reed West	Cl.	*Ticonderoga, N. Y.*	15 Painter Hall
Charles Cushman Wilcox	Cl.	*Greenfield, Mass.*	8 Painter Hall
Edwin Holmes Woods	Sc.	*Nashville, Tenn.*	59 Main St.
William Francis Youngs	Sc.	*Summit, N. J.*	32 Starr Hall

FRESHMEN: CLASS OF 1915

Bert Fay Andrews	Sc.	*Wallingford*	87 Main St.
George Remington Ayres	Sc.	*Ballston Spa, N. Y.*	15 College St.
Frank Montell Bartow	Cl.	*Ridgewood, N. J.*	29 Starr Hall
John Nelson Beckwith	Cl.	*Bethel*	18 Painter Hall
Harry William Burns	Sc.	*Middlebury*	71 Main St.
Irving Lyman Cabot	Cl.	*Windsor*	24 Starr Hall
George Hamilton Chapman	Cl.	*Worcester, Mass.*	17 Painter Hall
Clarence Elmer Cole	Cl.	*Orleans*	17 Starr Hall
Elbert Charles Cole	Cl.	*Orleans*	17 Starr Hall
Cornelius Emmett Coleman	Cl.	*Johnson*	125 Main St.
John Alaric Crane	Sc.	*McIndoe Falls*	15 College St.
George Clyfton Dade	Cl.	*Amesbury, Mass.*	30 Starr Hall
Clifford Theron Day	Sc.	*Morrisonville, N. Y.*	125 Main St.

Arthur True Ellison	Sc.	*Farmington, N. H.*	14 Painter Hall
Willard Allen Fletcher	Cl.	*Johnson*	13 Starr Hall
Walter Douglas Alexander Foote	Cl.	*Fitchburg, Mass.*	27 Washingt'n St.
George Henry Gardner	Sc.	*N. Marshfield, Mass.*	2 Starr Hall
Edward Napoleon Gosselin	Sc.	*Rutland*	25 Starr Hall
Wayne Kenyon Green	Sc.	*Richmond*	19 Starr Hall
Wayne Martin Haller	Ped.	*Shelburne Falls, Mass.*	27 Starr Hall
Donald Edgar Powers Hanna	Sc.	*East Highgate*	31 Starr Hall
Harold Webb Haskins	Cl.	*Bradford*	68 Court St.
Guy Clinton Hendry	Cl.	*North Hampton, N. H.*	16 Starr Hall
James Augustine Howard	Sc.	*North Brookfield, Mass.*	15 College St.
John Mott Hoyt	Cl.	*Middlebury*	R. F. D. 2.
Frank Silver King Hunt	Cl.	*West Lebanon, N. H.*	12 Painter Hall
Winfield Scott Huntley, Jr.	Sc.	*Middlebury*	117 Main St.
Merrill Lee Jenkins	Ped.	*North Troy*	15 Painter Hall
Charles Sherman Jones	Cl.	*Castleton*	15 Starr Hall
Bernard Michael Kavanaugh	Sc.	*Ballston Spa, N. Y.*	15 College St.
James Thomas Kenure	Sc.	*New London, Ct.*	26 Starr Hall
Albert Laburton Kimball	Sc.	*Bradford, Mass.*	28 Starr Hall
Horace Allen Knapp	Sc.	*St. Johnsbury*	Allen House
Robert Loder	Sc.	*East Orange, N. J.*	87 Main St.
Grover Cleveland McCullough	Sc.	*Stanley, N. J.*	8 Painter Hall
George Wilson MacLaughlin	Sc.	*Ticonderoga, N. Y.*	125 Main St.
Bernard Joseph McParland	Sc.	*Lawrence, Mass.*	3 Starr Hall
Robert Price Marsh	Sc.	*Chester, N. J.*	D. K. E. House
Benjamin Van Dyke Maurice	Cl.	*Mamaroneck, N. Y.*	13 College St.
Leonard Coleman Monahan	Sc.	*S. Framingham, Mass.*	10 Starr Hall
Maynard Cleveland Moore	Sc.	*Middlebury*	5 South St.
Glen Harrison Noyes	Sc.	*Tunbridge*	9 Painter Hall
Earle Leffingwell Parkinson	Sc.	*Billerica, Mass.*	14 College St.
Thomas Kenneth Penniman	Cl.	*Meriden, N. H.*	19 Starr Hall
Rupert Aaron Phelps	Sc.	*Marshfield*	18 Seymour St.
Frederick Reynolds Pihlman	Sc.	*Chatham, N. J.*	16 College St.
Wayne Murray Plummer	Sc.	*Laconia, N. H.*	21 Starr Hall
George Stephen Potwine	Cl.	*East Windsor, Ct.*	2 Starr Hall
Charles William Proctor	Sc.	*Amesbury, Mass.*	30 Starr Hall
Charles Spurgeon Randall	Sc.	*Amesbury, Mass.*	6 Painter Hall
Aldo Alfred Ratti	Sc.	*Proctor*	16 Painter Hall
Ralph Walter Ray	Cl.	*Orwell*	24 Starr Hall
Alexander Albert Robertson	Sc.	*Quincy, Mass.*	3 Starr Hall
Arthur Lyman Rogers	Cl.	*Lee, Mass.*	13 College St.

Richard Seidenberg	Sc.	*Newton Upper Falls, Mass.*	11 Painter Hall
Michael Francis Shea	Cl.	*New London, Ct.*	26 Starr Hall
Evart Rogers Sheldon	Sc.	*East Orange, N. J.*	31 Starr Hall
Samuel Sterling Sherman	Cl.	*Tunbridge*	15 College St.
Russell Earle Smith	Sc.	*Vergennes*	D. U. House
Francisco Lopez de Souza	Ped.	*Santo Antao, Portugal*	11 Painter Hall
Charles Thomas Spencer	Sc.	*Watervliet, N. Y.*	10 Painter Hall
Harold Joseph Swezey	Sc.	*Patchogue, N. Y.*	29 Starr Hall
Maurice Tuttle, Jr.	Sc.	*Westhampton Beach, N. Y.*	14 College St.
Oscar Voute	Sc.	*Montclair, N. J.*	10 Painter Hall
Raymond Cyrus Whitney	Sc.	*Millbury, Mass.*	15 College St.
Roy Thaddeus Whitney	Sc.	*North Clarendon*	12 Painter Hall
Earle Snow Wilson	Sc.	*Hyannis, Mass.*	16 College St.

WOMEN

SENIORS: CLASS OF 1912

Mabel Lois Agnew	Cl.	*Port Henry, N. Y.*	27 Pearsons Hall
Alice Weed Barnum	Cl.	*Jericho Center*	37 Pearsons Hall
Edith Marjorie Bates	Cl.	*Pittsfield, Mass.*	28 Pearsons Hall
Blanche Belle Bostwick	Cl.	*Burlington*	37 Pearsons Hall
Mary Elizabeth Bresnehan	Cl.	*Proctor*	31 Pearsons Hall
Margaret Helen Croft	Cl.	*Waterbury, Ct.*	2 Pearsons Hall
Helen Lillian Crosby	Cl.	*Methuen, Mass.*	Battell Cottage
Cathleen Veronica Driscoll	Cl.	*Ballston Spa, N. Y.*	Battell Cottage
Lou Mae Dutton	Cl.	*Montpelier*	4 Pearsons Hall
Marguerite Adah Ellison	Cl.	*Farmington, N. H.*	31 Pearsons Hall
Genevieve Isabelle Elmer	Cl.	*Middlebury*	49 Seminary St.
Elma Pruda Harwood	Cl.	*S. Glens Falls, N. Y.*	Battell Cottage
Thelma Gertrude Havens	Cl.	*Chester Depot*	Battell Cottage
Ada Belle Hill	Cl.	*Lake George, N. Y.*	2 Pearsons Hall
Ruth Hill	Cl.	*Wallingford*	38 Pearsons Hall
Sarah Hila Lewis	Cl.	*South Royalton*	Battell Cottage
Helen Susan Merrill	Cl.	*Lawrence, Mass.*	23 Pearsons Hall
Louise Frances Monroe	Cl.	*Cos Cob, Ct.*	30 Pearsons Hall
Gertrude Martha Murdock	Cl.	*Port Henry, N. Y.*	27 Pearsons Hall
Laura Lucinda Newell	Cl.	*Alstead, N. H.*	Battell Cottage
Minnette Carrier Norton	Cl.	*N. Westchester, Ct.*	35 Pearsons Hall
Hazel Gertrude O'Connell	Cl.	*Middlebury*	Sargent House
Rachel Fellows Pike	Cl.	*Worcester, Mass.*	117 Main St.
Ruth Hamblin Richner	Cl.	*Portland, Me.*	30 Pearsons Hall
Lena Dunbar Sears	Cl.	*West Hawley, Mass.*	52 Weybridge St.
Vivia Irene Stone	Cl.	*Springfield*	28 Pearsons Hall

May Irene Thayer	Cl.	*West Brattleboro*	12 Pearsons Hall
Lucy Amelia Willard	Cl.	*Vergennes*	Battell Cottage

JUNIORS: CLASS OF 1913

Fannie Gertrude Alden	Cl.	*Proctor*	36 Pearsons Hall
Mary Townsend Archibald	Cl.	*Rutland*	7 Pearsons Hall
Laura Romola Besiegel	Ped.	*Dalton, Mass.*	Battell Cottage
Esther Alice Boyce	Cl.	*North Andover, Mass.*	48 Pearsons Hall
Ruth Mary Brookins	Cl.	*Middlebury*	47 Pleasant St.
Sarah Davis Brown	Cl.	*St. Albans*	25 Pearsons Hall
Faye Belle Butterfield	Ped.	*Middlebury*	30 South St.
Caroline Elizabeth Buttolph	Cl.	*Middlebury*	111 Main St.
Julia Clifford Carter	Ped.	*Vergennes*	40 Pearsons Hall
Florence Ardelle Clark	Cl.	*Brookville, Mass.*	35 College St.
Wilma Caroline Cory	Cl.	*Saxton's River*	48 Pearsons Hall
Bessie Mildred Cudworth	Ped.	*S. Ashburnham, Mass.*	39 Pearsons Hall
Edith Mary Darrow	Cl.	*Middlebury*	6 Franklin St.
Grace Maria Ellis	Cl.	*Worcester, Mass.*	36 Pearsons Hall
Helen Atarah Harriman	Cl.	*North Adams, Mass.*	Battell Cottage
Jessie Lucinda Haskins	Cl.	*Granville, N. Y.*	20 Pearsons Hall
Bertha Annette Holden	Cl.	*Pittsford*	Battell Cottage
Alice Adella Holmes	Cl.	*Proctor*	26 Pearsons Hall
Eva Adelia Holt	Cl.	*West Rutland*	Battell Cottage
Phyllis Edwards Hopkins	Cl.	*Belchertown, Mass.*	39 Pearsons Hall
Kathleen Amelia Hunt	Ped.	*Middlebury*	R. F. D. 4
Mary Ida Johnson	Cl.	*Wallingford*	25 Pearsons Hall
Emma Elizabeth Kingsley	Ped.	*Middlebury*	11 Elm St.
Faith Blackmer Linsley	Cl.	*Middlebury*	Battell Cottage
Alice Rachel Peaslee	Cl.	*Contoocook, N. H.*	Battell Cottage
Annie Estelle Perkins	Cl.	*Berwick, Me.*	Battell Cottage
Mary Colton Reynolds	Cl.	*Fair Haven*	4 Pearsons Hall
Annah Belle Sheldon	Cl.	*West Salisbury*	6 South St.
Charlotte Leavitt Slocum	Cl.	*Amherst, Mass.*	33 Pearsons Hall
Barbara Harriet Smith	Cl.	*Middlebury*	Battell Cottage
Mildred Adeline Snow	Cl.	*Bellows Falls*	9 Pearsons Hall
Anna Mae Sterling	Ped.	*Middlebury*	20 College St.
Ruby May Vosburgh	Cl.	*Middlebury*	50 Court St.
Dora Mabel Willson	Cl.	*Lunenburg*	7 Elm St.
Stella Alice Wooster	Ped.	*Middlebury*	8 Elm St.

SOPHOMORES: CLASS OF 1914

Florence Mary Aseltine	Cl.	*Enosburg Falls*	24 Pearsons Hall
Ellen Mary Bailey	Cl.	*Wells River*	35 Pearsons Hall
Harriet Beecher Blakeman	Cl.	*Stratford, Ct.*	22 Pearsons Hall

Ruth Bingham Buck	Cl.	*Waterville, Ct.*	27 Washingt'n St.
Eunice Cady	Ped.	*Middlebury*	Mrs. L. G. Yeaw's
Helena Belle Carpenter	Ped.	*Enosburg Falls*	6 South St.
Sophia Noela DuBois	Ped.	*Bethel*	12 Pearsons Hall
Alice Maria Easton	Cl.	*Middlebury*	69 Pleasant St.
Amy Harriet Edmands	Cl.	*Island Pond*	21 Pearsons Hall
Isabelle Upton Esten	Cl.	*Middlebury*	55 Seminary St.
Stella Agnes Farrell	Ped.	*Middlebury*	38 College St.
Helen Louise Foss	Cl.	*Charlestown, N. H.*	9 Pearsons Hall
Mary Madeline Geran	Ped.	*Holyoke, Mass.*	32 Pearsons Hall
Irene Augusta Graves	Cl.	*St. Albans*	38 Pearsons Hall
Jessie Martha Graves	Cl.	*Walpole, N. H.*	26 Pearsons Hall
Eleanor Whitney Hatch	Ped.	*St. Albans*	11 Pearsons Hall
Helen Irene Haugh	Cl.	*Waterbury, Ct.*	29 Pearsons Hall
Charlotte Florence Jenne	Ped.	*Enosburg Falls*	24 Pearsons Hall
Gertrude Frances Kingsley	Ped.	*Middlebury*	11 Elm St.
Ethel Caroline Magoon	Cl.	*Coös, N. H.*	47 Pearsons Hall
Aura Edwina Mudgett	Ped.	*Richford*	22 Pearsons Hall
Caro Beulah Noyes	Cl.	*Salisbury*	10 College St.
Ruth Adelle Noyes	Cl.	*Salisbury*	10 College St.
Mary Edna Rockwood	Ped.	*Middlebury*	12 Seminary St.
Margaret Sharpe	Cl.	*Greenwich, N. Y.*	117 S. Main St.
Mary Agnes Shea	Ped.	*Middlebury*	11 High St.
Jennie Lois Spaulding	Cl.	*Craryville, N. Y.*	29 Pearsons Hall
Verena Italy Suter	Cl.	*Swanton*	21 Pearsons Hall
Julia Bosworth Wood	Ped.	*West Upton, Mass.*	Battell Cottage

FRESHMEN: CLASS OF 1915

Ida Nell Ainsworth	Ped.	*South Royalton*	36 College St.
Myrtle Helen Bain	Ped.	*Middlebury*	37 Washingt'n St.
Mary Ruth Bartley	Ped.	*Ashuelot, N. H.*	36 College St.
Mary Edith Bashaw	Cl.	*Richmond*	36 College St.
Edythe May Boyce	Cl.	*Waterbury*	6 Pearsons Hall
Mary Hayward Buck	Cl.	*Waterville, Ct.*	41 South St.
Florence Muzzey Butler	Cl.	*Rutland*	117 Main St.
Eliza Cady	Cl.	*Middlebury*	15 Pleasant St.
Mary Lucy Crane	Cl.	*Vergennes*	46 Pearsons Hall
Clara Huldah Dewey	Ped.	*Stowe*	15 Pleasant St.
Ruth Dutton	Ped.	*Cleveland, Ohio*	123 Main St.
Emma Louise Feeney	Cl.	*Ballston Lake, N. Y.*	20 College St.
Isabel Clara Field	Cl.	*Wells River*	36 College St.
Sarah Katherine Fish	Cl.	*Vergennes*	34 Pearsons Hall
Sarah Louise Funnell	Ped.	*Huntington, N. Y.*	15 Pleasant St.
Susan Olliffe Giffen	Cl.	*Albany, N. Y.*	44 Pearsons Hall
Fannie Olive Gill	Cl.	*Springfield*	Battell Cottage

Harriet Frances Grandey	Ped.	*Rutland*	40 Pearsons Hall
Mae Eleanor Guerin	Ped.	*Worcester, Mass.*	20 Pearsons Hall
Mary Frances Gunner	Ped.	*Hillburn, N. Y.*	Professor Lambert's
Ginevra Pollard Harlow	Cl.	*Chester*	Battell Cottage
Abby May Harriman	Cl.	*Middlebury*	97 Main St.
Clotilda Hayes	Cl.	*Lee, Mass.*	20 College St.
Ruth Hilton	Cl.	*Richmond*	15 Pleasant St.
Annie Josephine Hulihan	Cl.	*Center Rutland*	36 College St.
Irene Idelle Ingalls	Ped.	*Windham*	Battell Cottage
Ruth Kendall	Cl.	*Pittsford*	36 College St.
Edna Marion Latham	Cl.	*Northfield*	52 Weybridge St.
Irene Ethel McGregor	Ped.	*Waterbury, Ct.*	41 South St.
Grace Irene Mead	Cl.	*Selkirk, N. Y.*	44 Pearsons Hall
Laura Louise Mead	Cl.	*North Ferrisburgh*	22 Seymour St.
Margaret Park Mills	Cl.	*Townshend*	20 College St.
Mabel Alice Miller	Cl.	*Wells River*	46 Pearsons Hall
Sophie Donker Musgrove	Cl.	*Pittsfield, Mass.*	6 Pearsons Hall
Helena Catherine Norton	Cl.	*Newport*	6 South St.
Ruth Dickinson Norton	Cl.	*Vergennes*	34 Pearsons Hall
Bernice Ellen Parker	Ped.	*Essex Junction*	Battell Cottage
Florine Margaret Parker	Ped.	*Essex, Ct.*	Battell Cottage
Cora Eleanor Parkman	Ped.	*Thompsonville, Ct.*	15 Pleasant St.
Grace Elizabeth Peaslee	Cl.	*Contoocook, N. H.*	Battell Cottage
Margaret Gates Pike	Ped.	*Waterbury*	15 Pleasant St.
Marion Alice Pike	Cl.	*Stowe*	15 Pleasant St.
Frances Ruth Piper	Ped.	*Middlebury*	7 Weybridge St.
Elizabeth Joy Rose	Cl.	*Cornwall*	123 Main St.
Adelaide Ross	Cl.	*West Rutland*	32 Pearsons Hall
Martha Glene Sevrens	Cl.	*Middlebury*	89 Main St.
Harriet Emily Smith	Cl.	*Vergennes*	41 Pearsons Hall
Marion Sarah Thomas	Cl.	*Middlebury*	19 College St.
Elisabeth Mae Thorp	Cl.	*Shelburne*	Battell Cottage
Mabel Kathryn Tooley	Ped.	*Stratford, Ct.*	41 South St.
Josephine Tracy	Cl.	*Lee, Mass.*	20 College St.
Laura Eliza Walbridge	Cl.	*Brattleboro*	Battell Cottage
Ethel Whitmarsh	Ped.	*Whitman, Mass.*	45 Pearsons Hall
Alice Ward Wilson	Ped.	*New Haven*	36 College St.
Marjory Alexander Wright	Cl.	*Middlebury*	2 Storrs Avenue

SUMMER SESSION OF 1911

Whitelaw R. Allen	A*	*Cazenovia, N. Y.*
John A. Arnold	B	*Middlebury*
Myra A. Bagley	C	*Rutland*
Ada C. Baker	D	*East Orange, N. J.*
Edward Baker	D	*North Adams, Mass.*
J. Wheeler Baker	D	*Montclair, N. J.*
Lottie Baker	E	*Brandon*
Franklin M. Baldwin	D	*East Orange, N. J.*
Harold Banks	D	*East Orange, N. J.*
W. Eric Barnes	B	*Pittsburg, Pa.*
Mary B. Barrows	E	*New Haven*
Carson H. Beane	C	*Tuscola, Ill.*
Ruth B. Buck	B	*Waterville, Ct.*
Gertrude Burgess	D	*East Orange, N. J.*
Irene M. Burns	E	*Middlebury*
Thomas F. Burns	D	*Middlebury*
Albert F. Burt	C	*Middlebury*
Grace S. Buttolph	C	*Middlebury*
Eva S. Cady	E	*Jericho*
Marian K. Cady	A	*Middlebury*
Esther Carlson	D	*Chatham, N. J.*
William H. Carter	C	*Chelsea*
Angeline M. Carter	C	*Chelsea*
William W. Chalmers	B	*Fitchburg, Mass.*
Louise M. Chapin	B	*Stowe*
Idella M. Clark	E	*Worcester, Mass.*
Sylvia Clark	B	*Derry, N. H.*
Philip H. Condit	A	*East Orange, N. J.*
Elizabeth Conkling	A	*Long Branch, N. J.*
David H. Corkran	C	*Middlebury*
Theodora W. Crane	C	*Ballston Spa, N. Y.*
Carrie E. Damon	C	*Middlebury*
Marcia B. Darrow	A	*Middlebury*
Grace E. Davis	A	*Springbrook, N. Y.*
Wilfred E. Davison	B	*Lower Cabot*
Sidney Dodd	A	*East Orange, N. J.*
Edna V. Dolbeer	D	*East Orange, N. J.*
Ruth L. Dolbeer	A	*East Orange, N. J.*
J. Stewart Evans	D	*East Orange, N. J.*
Ellen M. Everitt	A	*Orange, N. J.*

* A, College Extension Courses and Lectures; B, Courses leading to the degrees of A.B. and B.S.; C, Courses leading to the degrees of A.M. and M.S.; D, College Preparatory Courses; E, Courses in Music.

Palmer W. Everts	D	*Granville, N. Y.*
Harry A. Farrar	C	*New Haven*
Mary E. Flynn	E	*Middlebury*
Joseph Froggatt	A	*East Orange, N. J.*
John A. Garvan	D	*East Orange, N. J.*
Harvey E. Goodell	B	*Readsboro*
Alan H. Graham	A	*East Orange, N. J.*
Alice E. Hall	E	*St. Johnsbury*
Woodburn P. Harris	C	*Sheffield*
Sumner D. Harrison	A	*East Orange, N. J.*
Jessie L. Haskins	B	*Granville, N. Y.*
Alice H. Hastings	A	*Hartford, Ct.*
Alison Hastings	A	*Hartford, Ct.*
Ann Hastings	A	*Hartford, Ct.*
Marjorie Held	A	*East Orange, N. J.*
Stanley Held	A	*East Orange, N. J.*
Ruth Hesselgrave	A	*Chatham, N. J.*
Susie W. Hesselgrave	A	*Chatham, N. J.*
Charles E. Hicks	C	*Sangerville, Me.*
Guilleomo L. Hubertson	A	*Santiago, Chili*
Gwendoline T. Hughes	C	*Fair Haven*
Kathleen A. Hunt	A	*Middlebury*
Rena R. Huntley	C	*Middlebury*
Edward S. Jamison	D	*East Orange, N. J.*
Walter Kaubisch	E	*Corning, N. Y.*
Addie Kellogg	E	*Shoreham*
Philip H. LaFleur	A	*Middlebury*
Robert Loder	D	*East Orange, N. J.*
Patrick H. Lynch	D	*Brandon*
Nina A. Mason	D	*Pawlet*
Elizabeth B. McFarland	A	*Middlebury*
Hettie McGraw	E	*Burlington*
Jennie B. McLellan	C	*Middlebury*
Ella Moore	B	*Island Pond*
Lyman A. Morhous	A	*Pittsburg, Pa.*
Gwendoline Morris	C	*Fair Haven*
Harriet D. Newcombe	A	*Boston, Mass.*
C. Beulah Noyes	B	*Salisbury*
Ruth Noyes	B	*Salisbury*
Joshua Z. T. Nyi	B	*Middlebury*
Grant P. Pennoyer	D	*W. Boothbay Harbor, Me.*
Carrie W. Pettis	E	*Lincoln, Neb.*
James E. Philoon	D	*Auburn, Me.*
Allen B. Potter	A	*East Orange, N. J.*
Clinton S. Reynolds	B	*Pittsfield, Mass.*
Lewis W. Sanford	B	*Lincoln*

Minnie Sanford	A	*Castleton*
Louis N. H. Seubert	D	*East Orange, N. J.*
Harold A. Severy	C	*Brandon*
Mrs. F. H. Shepard	A	*Orange, N. J.*
Florence Smith	D	*East Orange, N. J.*
Ray A. Stevens	A	*Chichester, N. H.*
George G. Taylor	A	*Granby, Mass.*
Hugh O. Thayer	B	*Middlebury*
Marion S. Thomas	A	*Middlebury*
Gerald Thorp	D	*East Orange, N. J.*
Guy A. Tuttle	C	*Proctor*
Arthur Vaughan	D	*Orange, N. J.*
Oscar Voute	D	*Montclair, N. J.*
John C. E. Voss	A	*Shoreham*
Chester M. Walch	C	*Proctor*
Mabel E. Wales	C	*Middlebury*
Edward C. Walker	A	*Richmond*
Maynard Wallace	A	*East Orange, N. J.*
Ella P. Warner	B	*Highwood, Ct.*
Jessie M. Warner	B	*Brandon*
Cora Whittingham	A	*East Orange, N. J.*
Charles C. Wilcox	B	*Greenfield, Mass.*
Edna H. Wilder	B	*New Haven*
Harriet A. Wilder	A	*New Haven*
Harry O. Williams	B	*Rutland*

SUMMARY

	Men	*Women*	*Total*
Graduate Students	8	5	13
Seniors	25	28	53
Juniors	27	35	62
Sophomores	39	29	68
Freshmen	67	55	122
	166	152	318
Summer Session	55	56	111
Total			429
Counted twice			21
Net Total			408

GEOGRAPHICAL DISTRIBUTION

UNDERGRADUATES ONLY

	Men	*Women*	*Total*
Vermont	61	93	154
Massachusetts	30	20	50
New York	26	12	38
New Hampshire	14	8	22
New Jersey	11	0	11
Connecticut	10	11	21
Rhode Island	2	0	2
Maine	0	2	2
Ohio	0	1	1
Tennessee	1	0	1
China	1	0	1
Japan	1	0	1
Portugal	1	0	1
	158	147	305

COLLEGE CALENDAR

1911.

September 21.	*Thursday*, 8.45 *a.m.* Beginning of first semester.
November 29 *to* December 4.	*Wednesday to Monday.* Thanksgiving Recess.
December 22 *to* January 2.	*Friday to Tuesday.* Christmas Recess.

1912.

January 26.	*Friday.* Winter Meeting of the Corporation in New York.
January 29 *to* February 3.	*Monday to Saturday.* Mid-year Examinations.
February 3.	*Saturday.* End of first semester.
February 5.	*Monday.* Beginning of second semester.
February 22.	*Thursday.* Washington's Birthday.
April 5–15.	*Friday to Monday.* Easter Recess.
May 9–11.	*Thursday to Saturday.* Junior Week.
May 30.	*Thursday.* Memorial Day.
June 10–14.	*Monday to Friday.* Final Examinations.
June 16.	*Sunday.* Commencement Sunday. 10.45 *a.m.* Baccalaureate Sermon. 8.00 *p.m.* Anniversary of the Christian Associations.
June 17.	*Monday.* Class Day. 10.30 *a.m.* Class Day Exercises. 3.00 *p.m.* Meeting of the Phi Beta Kappa Society. 8.00 *p.m.* Parker and Merrill Prize Speaking. 8.00 *p.m.* Annual Meeting of the Corporation.

JUNE 18.	*Tuesday*. Alumni Day. 8.00 *p.m.* Commencement Concert.
JUNE 19.	*Wednesday*. Commencement Day. 9.00 *a.m.* Meeting of the Alumni in the Chapel. 10.30 *a.m.* Commencement Exercises. 1.00 *p.m.* Commencement Dinner. 7.30 *to* 9.00 *p.m.* President's Reception.
JULY 2 *to* AUGUST 9.	Summer Session.
SEPTEMBER 19.	*Thursday*, 8.45 *a.m.* Beginning of first semester.
NOVEMBER 27 *to* DECEMBER 2.	*Wednesday to Monday*. Thanksgiving Recess.
DECEMBER 21 *to* JANUARY 2.	*Saturday to Thursday*. Christmas Recess.
1913.	
JANUARY 29 *to* FEBRUARY 1.	*Monday to Saturday*. Mid-year Examinations.
FEBRUARY 1.	*Saturday*. End of first semester.
FEBRUARY 3.	*Monday*. Beginning of second semester.

NOTE. All recess dates are inclusive.

INDEX

Admission, 13-28, 102, 103.
to Classical Course, 13-16.
to Pedagogical Course, 13-16.
to Scientific Course, 13-16.
to Advanced Standing, 27, 28.
to Graduate Study, 102, 103.
Definition of Points, 16-27.
Aid for Students, 117-121.
Alumni, Associated, 121.
Alumni Associations, 121, 122.
Appointments and Awards, 123-125.
Appointments, Honorary, 106.

Battell Cottage, 116, 117.
Beneficent Funds, 118-122.
Bequest, Form of, 7, 90.
Biological Laboratory, 111.
Biology, Department of, 42-48.
Applied Courses in, 47, 48.
Botany, 43-45.
Zoölogy, 45, 46.

Calendar, 138, 139.
Charter, The, 3-7.
Chemical Laboratory, 111.
Chemistry, Department of, 48-51.
Classical Course, 29.
Commons, Hamlin, 116.
Corporation, 8.
Committees of, 9.

Degrees Conferred, 123, 124.
Degrees in Course, 29-33, 102, 103.

Elective Groups, 33-36.
Engineering, Department of, 51-53.
English, Department of, 54-57.
Examinations, 104-106.
Expenses, 116, 117.

Faculty and Officers, 10, 11.
Faculty, Committees of, 12.
Fees for Admission to Advanced Standing, 28.
for Degree of Master of Arts or Science, 103.
for Laboratory Work, 117.
Forestry, Courses in, 43, 44, 48.
French, Department of, 57-59.

Geology, Department of, 59-61.
German, Department of, 61-63.
Greek, Department of, 63-67.
Gymnasium, 112.

Halls of Residence, 114-116.
for Men, 114, 115.
for Women, 115, 116.
Herbarium, 111, 112.
History of the College, 98, 99.
History, Department of, 67-70.
Honors, Special, 107.

Instruction, Courses of, 29-41.
Departments of, 42-89, 91-94.

Latin, Department of, 70-75.
Law Schools, Arrangement with, 89.
Legislative Action, 90, 101, 120.
Library, 109, 110.
Location, 99, 100.

Master of Arts, Degree of, 102, 103.
Master of Science, Degree of, 102, 103.
Mathematics, Department of, 75-77.
Museum of Natural History, 111, 112.

Offices, College, 113.

Pedagogical Course, 30, 31.
Pedagogy, Department of, 77-80.
Phi Beta Kappa Society, 106.
Philosophy, Department of, 81-84.
Physical Laboratory, 110.
Physics, Department of, 84-86.
Political and Social Science, Department of, 86-89.
President, The, and Fellows, 8.
Progress, Recent, 101, 102.
Prizes, 107, 108.

Reading Rooms, 110.
Record of Scholarship, 106.
Registration, 31-33.
Religious Services, 114.

Scholarships, 118-121.
State, 120, 121.
Scientific Course, 29, 30.
Self-help, 117, 118.
Students, List of, 126-136.
Summaries of, 137.
Studies, Outline of, 36-41.
Summer Session, 95-97.

Technology, Schools of, Arrangement with, 30.
Tuition, 103, 117.

Warner Science Hall, 110, 111.
Women's College, 90-94.

Young Men's Christian Association, 114.
Young Women's Christian Association, 114.

Entered as second-class matter at the Post Office, Middlebury,
Vermont, under act of Congress of July 16, 1894